



Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.

SECTOR 5 — CHART INFORMATION

SECTOR 5

NEW CALEDONIA (INCLUDING OFF-LYING ISLANDS AND REEFS)

Plan.—This sector describes the island of New Caledonia and several off-lying islands. The descriptive sequence is S to N on the extended sides of New Caledonia, with a ESE and NNW arrangement at the ends for the off-lying islands.

General Remarks

5.1 New Caledonia, also known as Nouvelle-Caledonie, is located about 750 miles NE of Brisbane, Australia. It is the principal island of the French Overseas Territory, and the fourth largest island in the South Pacific. The island is almost completely surrounded by a barrier reef, submerged in places, but nearly level with the sea, having many narrow passages through it. The distance of the reef from the main island varies; about 85 miles in the middle of the SW side the reef practically adjoins the shore; in other places it is from 1 to 15 miles off the intervening waters, being studded with reefs and shoals of coral and sand. There are several islands inside the line of the reefs, and on the seaward side there are various dangerous spots.

On neither side of the island do the reefs afford protection from winds blowing up or down the channels lying within the barrier reef and leading generally parallel to the coasts. These winds produce a choppy, disagreeable sea which rises quickly and quickly subsides. On the SW side of the island the inner channels are protected from a sea coming from the SW, as the barrier reef is on a level with the sea; on the NE side, where the barrier reef is largely submerged, there is little protection from a NE sea.

Outside the reefs the sea becomes steep and confused, particularly in the channel between New Caledonia and Iles Loyaute (Loyalty Islands). The general depth between the barrier reefs and the land varies from 37 to 91m. The bottom is nearly all hard rock or broken coral.

Although New Caledonia is a mountainous island and very broken in places, it has broad interior plateaus and coastal plains. The highest points of the mountain ranges are Mount Humboldt in the S, about 1,634m high, and Mount Panie in the N, about 1,642m. There is no central range, and the longest unbroken range is on the upper N and E side of the island. There is a lot of serrated land, barren and practically impassable. Great erosions, the result of torrential rains on a crumbling soil, are constantly going on and the land is cut and scarred in all directions.

The first impression of the navigator, who has been accustomed to the luxuriant vegetation of most Pacific islands, is that New Caledonia is bare and arid. The prevailing growth is a small, drab tree, the Niaouli, similar in appearance to the ubiquitous eucalyptus scrubs of Australia. The coconut palm grows on the coast, and many of the great valleys are filled with a luxuriant growth of the beautiful kauri pine.

Vessels navigating the inner channels should keep as far as possible to the weather side of the passage. Be at all times on guard against the effects of variable winds and strong tidal currents, and the resulting eddies and tide rips. It should be

borne in mind that in the reef-encumbered waters of the inner channels the number of hidden dangers is great and the existence of undiscovered hazards is probable, necessitating the maintenance of a sharp lookout from the masthead.

Winds—Weather.—On average, about three severe hurricanes a year affect some part of New Caledonia, mostly between January and March. They are sometimes of such small dimensions that they do not affect the whole island. They are usually moving in some direction between SW and SE. Storms approaching the island from the NE are often deflected by the high land and move SE.

Squally W winds accompanied by rain may occur on the W coast in all seasons during weak trade winds, while the E coast which is sheltered, has a breeze from SE.

On the W coast, the winds are deflected by land and sea breezes near the shore, the land breeze being the more prominent. The effects of these breezes often does not extend beyond the barrier reefs. It is reported that when vessels leave Noumea with a NW wind, they sometimes find a W or SW wind outside the passage. When leaving with a wind between E and SE, it is frequently between SE and S outside.

On the E coast, land breezes are rare and never extend to the barrier reef. With a SSE wind blowing in the W coast a fresh wind from SW often blows offshore, especially at night on the N and E coast of the island. The trade winds from ESE are said to reach its maximum strength near the shore at about 1400, but in the offing and beyond the reefs its greatest is reached between 1800 and 1900. Close inshore it subsides at sunset.

Tides—Currents.—New Caledonia is nearly surrounded by a barrier reef at about sea level with narrow openings; its coasts and anchorages are affected only by the tidal current. Outside the barrier reef the main oceanic currents are encountered, but close to the reef these become unpredictable.

Within the barrier reef the tidal currents are moderately regular, though they are accelerated or retarded by a strong breeze. The flood current runs NW and the ebb SE. On the E coast, during strong SE winds, the ebb current runs out through the passes and the flood sets in.

During 50 per cent of the flood and 50 per cent of the ebb, the currents are setting in directions almost at right angles to each other at the entrances of Canal de la Havannah and Passe de la Sarcelle. The result is violent eddies and a heavy breaking sea across the entrance of each passage, rendering it difficult to steer a ship except at high speed. At springs, the currents run at the rate of 4 knots through each passage and 2 knots in the offing.

The S subtropical current, having a predominate W set and a S limit in this vicinity at about the 26th parallel, divides on nearing New Caledonia and Iles Loyaute (Loyalty Islands). One branch, called the Rossel Current, sets NW along the whole E side of New Caledonia (outside the reefs), and its influence is most felt at a distance from the shore. After several days continuance of a fresh SE wind, the strength of this current is considerably increased. With the wind at N or NW, the force of the current is diminished, or a countercurrent is

established between Iles Loyaute and New Caledonia, running SE, and some days elapse after the cessation of the N wind before the normal NW current reappears.

The other branch of the great current passes to the S of Ile des Pins (Kunie), turns to the W and the WSW, and is deflected to the S before reaching Australia. The W side of New Caledonia is somewhat protected causing weak eddies, which are variable both in force and direction, and are present dependent on the wind and the action of one of the currents which pass the island.

The velocity of the tidal currents in Canal de la Havannah and Passe de la Sarcelle is high, and the S subtropical current impinging on this area renders the currents in these passages the strongest and most irregular in the vicinity of New Caledonia.

The S branch of the S subtropical current, after passing S of Ile des Pins, is further deflected by the great S projection of the barrier reef, the S limit of which lies more than 35 miles S of the S extremity of New Caledonia.

Pilotage.—Pilotage is compulsory for the following vessels within the waters of New Caledonia.

1. All foreign vessels regardless of their length.
2. All French vessels more than 60m in length.

French warships are exempt, as well as pleasure craft less than 60m in length.

Masters of pleasure craft less than 60m in length are advised to consider engaging the services of a pilot if unfamiliar with the area.

Regulations.—Vessels arriving from an area infested by rhinoceros beetles are subject to quarantine inspection. The local authorities should be contacted in advance of arrival for details and requirements. Vessels carrying hydrocarbons are subject to special regulations. See Pub. 120, Sailing Directions (Planning Guide) Pacific Ocean and Southeast Asia for details.

Caution.—Reports indicate that the set and drift of currents in the vicinity of the barrier reef surrounding New Caledonia are unpredictable. Extreme caution should be used in navigating these waters, particularly in an area defined by the following limits: a line extended first in a 180° direction from the E side of Passe de Boulari (Bulari Pass) for a distance of 35 miles; then to a position in 23°30'S, 167°00'E; then to a position in 23°15'S, 167°30'E; then to a position in 22°56'18"S, 167°45'E; and finally so that it is tangent to the E side of Ile des Pins. The area between these limits and the barrier reef is rendered extremely hazardous by unpredictable currents, and no vessel should enter it except in emergency.

The area between the barrier reef and the mainland has not been closely sounded; therefore, vessels should navigate with caution.

Rocky patches, covered by depths of about 7.3m, can be seen at a distance of 1 mile from an elevation of 24 to 30m; when close, the bottom can be seen in at least 18.3m. When there are passing clouds, the effect of light and shade on the water may be taken for the indication of a shoal, but the change of form and movement of a mere shade will soon become apparent. To have the sun ahead and at an altitude of less than 65° is one of the worst circumstances attending navigation within the reefs.

When navigating within the reefs without a trustworthy pilot or in unsettled weather, it will be prudent to make sure of reaching a convenient anchorage before nightfall or to stand out to sea through one of the passages during daylight.

Though many vessels have anchored between the barrier reef and the island without accident, it must be considered a dangerous thing to do, not only because of the risks normally inherent in taking anchorage on rocky bottom, but because of the likelihood of sudden changes in winds and weather.

Areas dangerous due to mines laid during the WWII are indicated in Pub. 120, Sailing Directions (Planning Guide) Pacific Ocean and Southeast Asia.

Islands and Reefs East of Ile des Pins (Kunie)

5.2 Ceva-i-Ra Reef (Theva-i-Ra Reef) (21°44'S., 174°38'E.), called Conway Reef until 1976, extends about 1.6 miles in an E-W direction. The breakers on it are visible at a distance of 7 miles. On the middle of the reef is a sand cay, 1.8m high, 0.2 mile long, and 73m wide. A stranded wreck of a coaster lies 0.15 mile S of the center of the cay, and the wreck of a fishing vessel lies on the NE end of the reef.

Ile Hunter (Hunter Island) (22°24'S., 172°06'E.), a 296m high volcanic block, has grassy slopes dotted with trees. Although the island is not an active volcano, it emits jets of sulphurous vapor. No detached dangers have been discovered off Ile Hunter, and it appears to be steep-to; depths of 73m having been obtained 90m offshore and 915m, 1 mile off.

Tide rips extend for 2 miles from the NW side of the island, and in places produce foam, which in sunlight has a greenish hue and resembles shallow water. The prevailing wind and current are reported to be from the SE. It may be possible under favorable circumstances to land on the N or NW side under the lee of some rocks.

Ile Matthew (Matthew Island) (22°21'S., 171°21'E.) is small in extent and consists of two parts joined by a low isthmus. The E part rises to a cone, 134m high, and the W part has the greater elevation of about 177m. On the S slopes of the W part of the island is a defined crater, from which sulphurous fumes were observed.

The shores of the island are free from known dangers except to the N and the SE. There are shoals extending outward from these areas for several hundred meters. The area around Ile Matthew has been reported to be volcanically active. Light green patches caused by rust colored water upwelling and dispersing have been observed in the vicinity of the island. An area of discolored water, which was reported to be volcanically active, was reported to lie 9 miles W of the island.

Strong currents set W off the NW and SW extremities of Ile Matthew. These unite about 0.5 mile from the W side of the island and form heavy tide rips, the foam from which is said to have the appearance of shoal water. The prevailing set in the general vicinity of the island is NW.

In 1990, a depth of 20m was reported to lie 2 miles ENE of Matthew Island. In 1999, an obstruction with a least depth of 5m was reported to lie 14 miles NW of Ile Matthew.

5.3 Ile Walpole (Walpole Island) (22°37'S., 168°57'E.) lies about 134 miles W of Ile Matthew. It is composed of coral, and presents the appearance of a narrow tableland, the vertical walls rising about 91.4m at the N end and about 100m at the S end. The summit of the island is barren in the S and wooded in the N; and the E side drops down to a green terrace.

There are some sheds in ruins on the S extremity, and a wharf in ruins just N of the SW extremity of the island. Landing may be affected on the W side of the island only in calm weather or with the wind from an E direction. It is reported that landing is possible on the E side of the island in good weather. The anchorage on the SW side of the island is not safe, as the depths decrease rapidly on approaching the shore.

A N set of 0.5 knot has been observed off the E side of the island.

Caution.—Mariners are advised that the majority of islands and reefs in this area have been reported to lie elsewhere than charted.

A bank, with a depth of 18.3m or less, is reported to be about 38 miles SW of Ile Walpole. Vessels are advised to avoid this vicinity. Ellet Bank, with a depth of 25.6m, lies about 34 miles SE of Ile Walpole.

Banc de L'Orne (L'Orne Bank) (22°24'S., 168°56'E.), about 12 miles N of Ile Walpole, has depths of 10 to 24m, and a sand and gravel bottom. It appears to be quite extensive. Depths of 24 to 27m have been reported between the bank and Ile Walpole.

Durand Reef (22°02'S., 168°39'E.), located about 26 miles NW of Banc de L'Orne, is about 0.7 mile in diameter and has depths of less than 2.7m. This reef is particularly dangerous because it does not always break, and the soundings give no warning of its proximity. A depth of 384m has been obtained 0.5 mile W of it.

Reefs and Islands off the Southeast Side of New Caledonia

5.4 Extensive reefs, consisting of two separate horns, extend about 35 miles S and 40 miles SE of New Caledonia. Ile des Pins, the largest of the islands close off the coast of New Caledonia, lies near the SE extremity of the SE horn.

Approaching the S coast of New Caledonia requires particular care. The high ground is not always easy to identify, as the peaks are often hidden by mist or clouds. The shape and distance of the islands and islets in this vicinity are often misleading due to mirage.

Pilotage.—See [paragraph 5.1](#) for further information.

Ile des Pins (Kunie) (22°38'S., 167°29'E.), located about 29 miles ESE of the S extremity of New Caledonia, is the principal island off the coast. It is surrounded by numerous reefs and islets, particularly along the S and W coasts. The shore of Ile des Pins is generally low, stony, and densely covered with brushes. The land gradually rises to a undulating, brownish red plateau, which attains its maximum elevation near the SW part of the island.

The E extremity of the island is almost free of reefs, but the N, W, and S sides are encumbered by broken and extensive reefs with deep anchorages within them. Navigation is intricate without the aid of a pilot.

Pic Nga (Nga Peak) (22°39'S., 167°30'E.), about 266m high, is conical and heavily wooded, rising on the S part of Ile des Pins. It is visible for about 30 miles in clear weather, and appears as a twin peak when seen from the SW. Ile des Pins is a good radar target at 22 miles; and the breakers can be picked up by radar at about 8 miles.

The island Koutomo lies off the SE side of Ile des Pins, from which it is separated by a shallow narrow passage.

Recif Nokanhoui (22°45'S., 167°36'E.) encloses a lagoon open to the SE. On the S and E extremities of the reef are Ile Ami and Ile Ana, two bare sand cays. In the vicinity of Recif Nokanhoui, the general current sets to the W and is rather strong.

Torch Bank (22°52'S., 167°41'E.), located 17 miles, bearing 134° from Pic Nga on Ile des Pins, has a least depth of 31m.

Anchorage.—In general, the anchorages at Iles des Pins are safe during good weather, or during the prevailing E winds. During the bad season if the barometer is low, or if the winds veer to the W, it is not advisable to seek shelter at these anchorages. All of these anchorages require local knowledge. In any case, the channels and passes leading to these anchorages should be navigated with caution, as numerous coral heads standing up in deep-water may be found here, along with numerous unmarked reefs and shoals.

Passe Nokanhoui, between Recif Nofanhoui and Koutomo, is a little less than 0.8 mile wide between the reefs on either side, and has a least depth of 11m in the fairway. There are some detached patches, with depths of from 8.8 to 10m, about 2 miles E of the S extremity of Koutomo Island. This pass requires local knowledge.

5.5 Ile Brosse (Alcmene) (22°43'S., 167°28'E.), covered with trees, is located on the W extremity of a reef extending about 5 miles W from the S end of Koutomo. Mouillage Alcmene and Port de Vao are formed between this reef and the S side of Ile des Pins (Kunie).

Mouillage Alcmene and Port de Vao, the latter available only for small vessels, are not very secure except with winds from an E direction. They are open to the W or SW winds, which often are very violent and raise a heavy sea. Landing from these anchorages is often difficult, and the tidal currents are very strong.

Tides—Currents.—Tidal currents generally set through Passe Nokanhoui at a moderate rate. If there is a SW wind during flood current, which sets W, the sea becomes agitated. When the SE wind is established, there is no swell, but the current then is very strong. For these reasons, the passage is not recommended for small vessels.

Baie de Kuto (22°40'S., 167°26'E.), just N of the **Kuto Peninsula** (22°40'S., 167°28'E.) is generally used by vessels visiting Ile des Pins. The holding ground is fairly good, but a swell penetrates into the bay and cause vessels to roll. Large vessels anchor outside the bay, but as close in as is possible to avoid the swell coming around the Kuto Peninsula. Depths of more than 9m may be found if the W extremity of the peninsula is kept bearing less than 200°. This anchorage, as well as the approaches to it, requires local knowledge.

Baie Ouameo, on the NW side of Ile des Pins (Kunie), affords anchorage according to draft, and is accessible from the N by two passages, one on either side of **Recif Tiare** (22°28'S., 167°23'E.).

The W passage is 1 mile wide, and with Pic Nga bearing 147°, will lead through it towards Recif Numae, about 2.8 miles S of the S extremity of Recif Tiare. The E passage is narrow, but free of dangers in the fairway. Pic Nga, in line with the W side of **Ile Moretiga** (22°32'S., 167°26'E.), bearing

about 156°, will lead through it. The reefs in the vicinity of this passage can be easily distinguished.

The passes and the anchorage require local knowledge, and may best be seen on the chart.

Mouillage de Gadji (Gadji Anchorage) is sheltered by a barrier of reefs, and may be entered from the NW or E. The NW approach is via Passe de Uapan (Passe de Gadji), N of the reefs and islets that separate the anchorage from the bay, with Pic Nga bearing 165°. When **Ile Gie** (22°30'S., 167°26'E.), the N of the wooded islands which extend NW from Ile des Pins, bears 270°, alter course to 117° and steer for the anchorage.

To enter by Passe de Oupe (Passe de Upe), the E entrance, steer with Pic Nga bearing 191°, slightly W of a small beach at **Oupe** (22°33'S., 167°31'E.) until clear of the E extremity of the reef forming the N side of the anchorage; then steer 256° and anchor, in a depth of from 29 to 35m, with moderately good holding ground, about 0.5 mile offshore, about 1.3 miles E of the N extremity of Ile des Pins. The passes and the anchorages listed above require local knowledge.

Baie de Ougo (Ugo Bay) (22°34'S., 167°33'E.), on the NE side of Ile des Pins, is open to the N and affords temporary anchorage only to small vessels having local knowledge. To reach the entrance of the bay, steer a course of 210° for Pic Nga. When W of the reef which forms the E side of the bay, turn S and pass E of the N island in the bay. The anchorage is 0.15 mile E of this island. A 3.7m patch lies 0.2 mile N of the N island in the bay.

Passages Between Ile des Pins and New Caledonia

5.6 Passe de la Sarcelle (Sarcelle Passage) is the first passage of any importance through the reefs lying NW of Ile des Pins. This passage, which is about 12 miles from Ile des Pins, is wide and free from any known dangers. The passage may be recognized at 2 to 3 miles by **Rocher Ietendi** (Ietendi Rock) (22°26'S., 167°13'E.) about 3m high, located on and near the E end of Recif Nokueka (Nokoueka). The islets **Ile Ndie** (22°31'S., 167°14'E.), **Amere** (22°27'S., 167°06'E.), and **Kie** (22°23'S., 167°04'E.) make it possible to recognize the pass and fix position if Rocher Ietendi (Ietendi Rock) is not seen.

Passe de la Sarcelle is traversed by strong tidal currents. There is a heavy sea when the wind is against the current.

Mouillage d'Amere (22°26'S., 167°09'E.), N of Recif Gunoma and Passe de la Sarcelle, affords temporary anchorage, but is deep and provides little shelter in bad weather.

This anchorage is located within a nature preserve and is bound by a Restricted Area best seen on the chart. Entry into this Restricted Area is prohibited without permission.

Banc Coetlogon (22°18'S., 167°07'E.), on the N side of the E entrance to Canal de la Havannah, about 12 miles NNW of Passe de la Sarcelle entrance, has a least depth of 9.1m. As there may be other undiscovered patches, a good lookout from aloft is necessary at all times. The clearness of the water in this locality allows the bottom to be seen at a sufficient distance to avoid shoal depths. Several charted shoal patches lie N of the reef, while a 12m patch lies SE of the reef.

Canal de la Havannah (22°20'S., 167°05'E.), about 3 miles SW of the S extremity of Banc Coetlogon, is the passage normally used by ships approaching from the SE, E, or NE, and bound for Noumea, about 40 miles W. The E entrance is

about 1.3 miles wide between **Recif Komekame** (22°21'S., 167°04'E.) to the S and Banc du Vandegou, on the NW side of the fairway. The sea will break at times in the entrance when winds are counter to the currents, giving the impression that it is breaking on reefs. The channel has been swept to a depth of 10.5m. A string of shoals and dangers, including Bancs Kie and Banc Ionontea, extends parallel to, and to the S of, the route. A local magnetic anomaly was reported to exist in Canal de la Havannah.

Tides—Currents.—The flood current sets SW, and the ebb NE; they have a velocity of 3 to 5 knots. The flood is established about 1 hour before LW, and the ebb about 1 hour before HW. About the time of the change of tide, there are violent eddies, and caution should be exercised.

Great care should be taken in approaching Canal de la Havannah. Strong and variable tidal currents may be encountered setting NW towards **Banc du Vandegou** (22°20'S., 167°03'E.) or SE towards Recif Komekame, where several wrecks have occurred. When there is a strong NE wind during ebb current, the sea is often very heavy in the entrance to Canal de la Havannah. It sometimes happens that the current eddies, extremely violent and constantly shifting, make the sea very rough and choppy, and give the reefs between New Caledonia and Ile des Pins an unbroken appearance. Small vessels and boats should then wait for the flood current before navigating the E part of Canal de la Havannah.

The flood current is stronger on the N side of Recif Ioro, and the ebb current is stronger on the S side.

Aspect.—A vessel coming from the SE will first sight Pic Nga, the summit of Ile des Pins; if coming from NE, it will sight the mountains of the E coast of New Caledonia. At a distance of 30 miles from the coast, the mountains have the following aspects beginning at the S: a row of conical hills; a long crest without identifying marks; a cut in which there is a detached sharp peak, **Mont Gouemba** (Mount Guemba) (22°11'S., 166°56'E.); and at **Cap Pouaret** (22°06'S., 166°58'E.), a ridge which is often enveloped by fog.

From seaward, Nogoungouet (Nogungueto), 258m high, the second highest peak on the island and located on the SW side of the island, open a little S of Cap Ndoua on a bearing of 246°, leads to a position from which the entrance range may be seen. Four structures, in line bearing 247°, three of which are lighted and serving as the entrance range for this channel, are situated on Cap Ndoua. The structures are difficult to identify in the afternoon.

5.7 **Cap Ndoua** (22°24'S., 166°55'E.), the S point of New Caledonia, is at the SW end of Canal de la Havannah. The cape, as well as the reef which fringes the N side of the passage, is steep-to. It is reddish in color, high, and prominent, thereby forming one of the useful marks for negotiating the passage. Vessels approaching Cap Ndoua from the E must be careful not to confuse it with Ile Ouen, in the background, into which it blends.

Recif Ioro (Ioro Reef) (22°23'S., 166°58'E.), awash at LW, lies about 1.5 miles ENE of Cap Ndoua and is easily distinguished. It is marked by a light on its NW extremity, and may be passed on either side.

A shoal, having a depth of 16m, lies about 2.2 miles NE of Recif Ioro Light. A shoal, with a depth of 7.8m, lies about 4.2 miles ENE of the same light.

Pilotage.—Pilotage is available for this channel. See the Noumea port description in [paragraph 5.18](#) for further information.

Anchorage.—Anchorage should not be taken in Canal de la Havannah under any circumstances as it is impossible for the anchor to get sufficient grip in the hard, rocky bottom to hold a ship even during a calm. If for any reason a vessel finds it necessary to anchor while traversing Canal de la Havannah, it may do so in certain of the inlets indenting the S coast of New Caledonia. These anchorages are described with that stretch of coast.

South Coast of New Caledonia

5.8 Port de Goro, at the E entrance to Canal de la Havannah, is a long, narrow inlet immediately NNE of **Cap Reine Charlotte** (Cap Queen Charolotte) (22°21'S., 167°00'E.). Besides the reef which forms the E side of the inlet, there is across its S part an extensive reef, which forms two narrow entrance channels by either of which a vessel may enter the port. Local knowledge is necessary. On the W end of this reef, named Center Reef, are two low islets. A light, with a racon, is shown on the NE side of Passe de Goro, a little over 2 miles ENE of Cap Reine Charlotte. The beacons in Port de Goro should not be relied upon.

A local magnetic anomaly has been reported in the vicinity of Port de Goro.

A bank, near the center of Port de Goro, has a least depth of 0.9m, and there are other patches within the 9.1m curve surrounding it. About 1 mile N of this bank, the depths are shoal and the bottom rocky.

Cap des Cannibales (22°19'S., 167°01'E.) is a large point of land with wharves of a mining company situated about 0.5 mile N. The wharves were reported destroyed. A loading conveyor extends from a pier on the W shore at Port de Goro, to water deep enough to permit barges to load ore.

Tides—Currents.—Port de Goro is subject to continual tidal currents, but not as strong as those in the two entrances. One current enters through **Passe de Toemo** (22°21'S., 167°01'E.) and flows out partly through Passe de Goro and partly N along the coast; the other current sets in the reverse direction. Both currents set across the entrances to some extent.

Anchorage.—Anchorage is available here on the following ranges and distances from Cap des Cannibales, over a bottom of sand, or sand and soft mud:

- a. 104°, 1,280m, in a depth of 20m.
- b. 134°, 640m, in a depth of 40m.
- c. 010°, 732m, in a depth of 18m.

Anchorage can be taken, in 12 to 16m, soft mud and sand, almost anywhere in the N part of the port N of the shoals in the center of the port. To reach this anchorage area, caution is advised so as to avoid a rocky spit, with a depth of less than 3.6m, which projects about 0.4 mile SE from a point on the coast located about 1 mile N of Cap des Cannibales. This anchorage area is protected from the most violent winds.

Caution.—Port de Goro may be entered by either Passe de Goro, E of Center Reef, or Passe de Toemo, W of the same reef. An allowance must be made for the tidal current, a careful lookout kept from aloft, and due regard given to the shelving sides of the reefs, especially in Passe de Goro. It is reported

that Passe de Toemo is preferred because of its greater depth, and the reefs on either side are steep-to, with the tidal current setting more nearly along the axis of the channel.

5.9 Port de Koue, entered 1.5 miles W of Passe de Toemo, is accessible only to boats.

Port Boise, the entrance of which is about 1 mile SW of Port de Koue, is a landlocked harbor with good holding ground, but is open to the SE. A small pier, reported (1997) destroyed, is situated on the NE side of the port. The port is entered on the alignment of two beacons bearing 302°, standing on the bay's W shore. The port entrance points are also beacons. This anchorage requires local knowledge.

Baie du Prony (Prony Bay) (22°22'S., 166°52'E.), NW of Cap Ndoua, is a large irregular-shaped harbor divided by a promontory extending in a N-S direction into two parts. Each has several small bays along its shores. The width of the entrance between the extremity of the reef extending from **Pointe Est**, the E entrance point, and an islet, close SE of **Ile Montravel** (22°23'S., 166°51'E.) on the W side, is 1.75 miles. A light is shown on the S extremity of the reef extending a little over 0.5 mile SW of Pointe Est. A depth of 12.8m lies about 1 mile WSW of Pointe Est Light. The bay has considerable depths, but offers good shelter to any class of vessel. Navigation should be undertaken only in the daytime or on a very clear night. There are many species of poisonous fish within the bay.

Ile Casey (22°21'S., 166°51'E.) lies nearly midway between the SW extremity of the promontory extending S from the head of the bay and the mainland to the W. The island may be passed on either side and a draft of 8.8m can be carried in mid-channel.

A conspicuous installation for the loading of ore stands on the E side of a short peninsula, about 0.8 mile NE of the village of **Prony** (22°20'S., 166°49'E.), on the W side of the bay. A small pier here will accept vessels up to 150m in length, with a maximum draft of 8.8m.

When approaching this pier, take care to avoid a rock with a depth of 1.6m, which may be passed on either side.

Anchorage.—Anchorage within the bay, which requires local knowledge, may be had in several of the coves and inlets, as may best be seen on the chart.

5.10 Ile Ouen (22°24'S., 166°50'E.) lies with its NE extremity about 4.5 miles W of Cap Ndoua, and may be considered the W limit of Canal de la Havannah. The island is mostly barren, rugged and hilly, with peaks varying in height from 151 to 325m. It may be identified by its dark color, contrasting with the mountains behind and N of it. The slopes of some small streams are covered with beautiful vegetation during the rainy season.

Baie Ouara, on the E side of Ile Ouen, is a small indentation fronted by **Recif Ma** (Ma Reef) (22°26'S., 166°51'E.). This bay can be entered by rounding either end of Recif Ma; the N entrance is better. There is a jetty at the head of the bay.

Anchorage, in a depth of 20m, may be obtained in the middle of the bay. A conspicuous white church can be seen on the S coast of the bay.

Port Koue (Port Koube) and Anse Koumbe (Anse Kembe), which indents the coast S of Ouava quite deeply, have a common entrance 0.1 mile between the lateral reefs. Port Koue has

a tide rip in strong E winds, but the sea always is calm in Anse Kembe.

Port Koutoure (22°28'S., 166°48'E.) is a basin sheltered by reefs off the island. The port is protected from N winds and from the sea in all directions. The entrance from the E, by the passage between **Recif Niagi** (22°30'S., 166°48'E.) and the small reef to the E of it, is narrow, but deep. The exit by the W passage, **Passe Nokoue** (Noku Passage) (22°28'S., 166°46'E.), is difficult on account of the narrowness of the channel which is only 91.4m wide, and the sharp turn necessary to clear a patch of black rocks off the extremity of the island. The tidal currents are very strong, and vessels drawing more than 3m should not attempt it. Anchorage is available within a line joining the N entrance point of the E end of the bay and the W point of the bay.

Caution.—There are two prohibited anchorage areas in the vicinity of **Pointe Nokoue** (22°28'S., 166°47'E.). One lies NW and the other SE from the point, and their limits are marked by yellow buoys. Extreme care in the area is necessary not to interfere with aircraft landing or taking off.

5.11 Baie Tioae (Tioae Bay) (22°26'S., 166°46'E.) is an open anchorage of moderate depths. During strong winds from the SE through S, this bay affords good anchorage, in depths of 20 to 25m, good holding ground, opposite a small, sandy beach bordered by coconut trees at its S part. It is not advisable to go far into the bay, as the bottom may be composed of coral. If the wind should veer to the SW, vessels should return to Canal Woodin, about 1.8 miles N.

Ilots Tioae are two islets lying 0.8 mile W of the N entrance point of Baie Tioae.

Vessels can enter Baie Tioae by passing either W and S of Ilots Tioae, or between Ilots Tioae and the N entrance point of the bay. Vessels choosing the latter should keep on the Ilots Tioae side of the center of the passage, as a spit with a least depth of 3.7m extends about 0.3 mile SW from the bay's N shore.

Baie Ire (22°24'S., 166°48'E.), about 1.5 miles NE of Baie Tioae, offers good shelter from the heaviest gales. Each side of the bay is skirted by a strip of coral reef, narrow and steep-to. The inner part is fringed by a sandy beach, outside of which is a mudbank, which extends up to 0.2 mile offshore. Behind the sandy beach is an extensive level plain which is frequently inundated.

Anchor in Baie Ire, in 23.8m, with the peak of Ia Pic, about 3.8 miles distant, bearing about 300°. Vessels will almost completely escape the effects of the current.

Baie Kouo (22°24'S., 166°49'E.), with a steep shore bordered by a narrow, very sheer reef, is located a little over 1 mile ENE of Baie Ire. Anchor off the bay, in 23m, mud, keeping more than 0.1 mile offshore. Tidal currents cause eddies which make a vessel swing continuously.

Canal Woodin, from 0.5 to 1 mile wide, separates Ile Ouen from New Caledonia. The fairway has depths of 14.6 to 46m, and the shore on each side is steep-to and free from any known danger. The channel has been dredged to 12m.

5.12 Pointe des Pins (22°23'S., 166°50'E.) is the termination of the promontory which extends SE from New Caledonia. The point is covered with fir trees.

Pic Ia, 487m high, is located on the N side of Canal Woodin, about 5.5 miles W of Pointe des Pins. The peak is very conspicuous and is an important mark for entering Canal Woodin from the E.

Tides—Currents.—In Canal Woodin, the flood current sets W, and the ebb E. Ordinarily, the current has a velocity of 3 to 4 knots, but with very high tides it has a velocity of 5 knots. Along the coast of Ile Ouen the current has less strength than in the middle of the passage or along the coast of New Caledonia. A countercurrent runs close off the N shore of Ile Ouen.

Anchorage.—On the N side of Canal Woodin, there is a large open bay with depths of 16.5 to 33m. Since the bay is exposed to SE winds, it would be preferable to anchor in Baie Ire on the N side of Ile Ouen.

In case of necessity, vessels could anchor in Canal Woodin. The bottom here is composed of soft coral.

Directions.—From a position with the rear structure of **Cap Ndoua** (22°24'S., 166°55'E.) range bearing 009°, distance about 1 mile, a course of 270° is made good for 2.3 miles until the light on the extremity of the reef extending from Pointe Est bears 000°, distance 1,006m. From this latter position a course of 290° is made good for almost 2 miles to where a white rock on the islet close SE of Ile Montravel bears 014°, distance 0.7 mile. The course is then altered to bring Ia Pic dead ahead bearing 285°, and maintained until the white rock on the W side of Point des Pins bears 072°, a run of about 2.3 miles. Alter course to 252°, keeping the white rock astern, and this course is maintained for about 3.3 miles, until the W extremity of Ilots Tioae bear 170°, then follow the recommended track shown on the chart.

The W entrance to the channel is marked by lights, in line bearing 088°.

West of Canal Woodin there are several bays along the coast, with high mountains extending along the shore, which curves S beyond Baie de Boulari, and forms the peninsula on which is Noumea.

5.13 Mont Dore (Mount d'Or) (22°16'S., 166°35'E.), located about midway between Canal Woodin and Noumea, attains a height of 774m. It is a good landmark.

Baie Uie (22°21'S., 166°44'E.), just N of Ia Pic, affords anchorage, in depths of 5.5 to 11m, good holding ground. A vessel should not go too far into the bay, as the bottom is rocky and uneven in its NE port.

Baie Ngo, 1.5 miles WNW of Baie Uie, affords anchorage in depths of 5.5 to 11m, and is a sheltered port. There is a landing pier on the W shore.

Baie de Mouea (22°18'S., 166°38'E.) is located about 4 miles NW of Baie Ngo. Anchorage is available, in a depth of 13m, with the S extremity of Ile Nde bearing 247°, 2.3 miles distant.

Baie de Boulari (22°16'S., 166°32'E.) affords anchorage in one of the coves WNW of Mont Dore (Mount d'Or). Anchor also off the entrance to Anse du Charbon in the NE corner of Baie de Boulari in 4 to 8m.

Baie de Magenta (22°17'S., 166°29'E.), about 3 miles WSW of Baie de Boulari, is encumbered on its NE side by islets and reefs. The remainder of this bay is clear as far in as Megenta Dock on the SW side near the head, except for a 3.9m patch

about 1 mile E of the dock. A channel dredged to depths of 7 to 10m, with diminishing depths, leads into and abreast the dock.

Port Ngea (22°18'S., 166°28'E.), situated about 2 miles SSW of Baie Ouen, has irregular depths of 5 to 14m. Anchorage may be obtained in Port Ngea. There are several shoals entering and within the port. A shoal with a least depth of 2.8m extends up to 0.5 mile SSW of **Ile Uere** (Ile Ouere) (22°19'S., 166°28'E.).

Ilot Porc-Epic (22°20'S., 166°34'E.) is the outermost of a group of islands on the E side of Baie de Boulari. It is rocky and the only one covered with fir trees. Anchorage may be taken either E or W of the islands.

Directions.—From the W end of Canal Woodin to Noumea, follow the recommended track on a course of 277°, change course to 297.5° when the Ilot Porc-Epic Light is in line with the old signal tower in Noumea on this bearing. At night, this course is within the white sector of the light on Ilot Porc-Epic. When Ilot Porc-Epic is about 0.3 mile distant, alter course to 270°, passing E and N of several shoals best seen on the chart. When the range lights shown from Ile Nou are in line bearing 347°, steer for them.

Passages South and West of Noumea

5.14 Several passes lead through the barrier reef S and W of Noumea. The main channels, which are marked, are Passe de Boulari and Passe de Dumbea.

Pilotage is compulsory for the following vessels within the waters of New Caledonia:

1. All foreign vessels regardless of their length.
2. All French vessels more than 60m in length.

French warships are exempt, as well as pleasure craft less than 60m in length.

Masters of pleasure craft less than 60m in length are advised to consider engaging the services of a pilot if unfamiliar with the area.

See the Noumea port description in [paragraph 5.18](#) for details on pilotage.

With the exception of vessels drawing less than 8m, and carrying less than 8,000 tons of petroleum products, tank vessels must proceed to the Passe de Boulari pilot boarding ground to take a pilot. Vessels are required to remain at least 5 miles off the reef while awaiting the pilot vessel, or in the absence of reefs, 5 miles from the territorial waters of New Caledonia.

Tank vessels drawing less than 10m and transporting less than 20,000 tons of petroleum products are permitted to transit Passe de Boulari. Vessels drawing more than 10m, and carrying more than 20,000 tons of petroleum products, are restricted to the transit of Passe de Dunbea, in daylight only.

Passe de Kuare (22°47'S., 166°45'E.) is about 20 miles S of the S extremity of Ile Ouen. It lies between Neokouie and Neokumbi Reefs, and was the first practical passage about which anything was known. It has a depth of 20.5m. Passe de Uatio, 3.8 miles NW of Passe de Kuare, has a least charted depth of 34m. Passe de Mato, 5 miles NW of Passe de Uatio, has depths of 22.5m. These passages may be used only by vessels with local knowledge.

Passes de Boulari, entering the barrier reef between Grand Recif Abore and Grand Recif Kue, is the main approach to

Noumea from the S. The pass is divided into three entrance channels, described below. All three channels are easy to navigate, but Passe du Nord is generally used the most, although it is the narrowest and shallowest of the three.

5.15 Passe du Nord (Northern Passage) (22°30'S., 166°26'E.) is 0.4 mile wide between Grand Recif Abore and Recif To, but the navigable width is reduced to 463m. Although this passage is the narrowest and shallowest of the passages, it is preferred by the pilots because it can be navigated by all classes of vessels during the usual SE winds.

A conspicuous stranded wreck lies on the W side of Grand Recif Abore, about 4.8 miles NW of the S extremity of the reef. It is reported to be an excellent visual and radar target.

Passe Centrale (Central Passage) (22°31'S., 166°26'E.) is about 0.9 mile between Recif To and Recif Le Sournois, 1 mile S. The fairway is deep, but its width has been reduced to about 0.6 mile by the banks on either side. The bottom can be seen in parts of the passage at a depth up to 23.8m. In transiting the passage, preference should be given the N side of the fairway.

Passe du Sud (22°32'S., 166°26'E.), 0.5 mile wide between Recif Le Sournois and Recif Toombo to the S, has depths of 24.9 to 43.8m.

Recif Toombo (22°33'S., 166°27'E.) is steep-to on its seaward side. Its N end prolongs itself a short distance under water, but this prolongation should not be a danger, as the bottom can be seen at depths of 12.8 to 14.6m. A stranded wreck lies on the NW side of the reef.

Tides—Currents.—In Passes de Boulari, the ebb current leaves with a considerable velocity; the flood enters with a more moderate velocity.

Aspect.—When a vessel is approaching from W, the high land in the vicinity of Noumea will generally be seen. **Mont Mou** (22°04'S., 166°21'E.), 1,211m high with its two horns about 13 miles NNW of Noumea, and **Mont Mone** (22°10'S., 166°31'E.), 1,079m high, 7.5 miles NE of Noumea are visible, depending on the weather. **Mont Dore** (22°16'S., 166°35'E.) 772m high, lies about 7.8 miles E of Noumea and is separated from Mont Mone by a remarkable valley. It sometimes happens that although the horizon may appear to be moderately clear, the higher land of Mont Mou and Mont Dore may not be seen until some time after the light on Ile Amedee (Passes de Boulari) is sighted.

5.16 Ile Amedee (22°29'S., 166°28'E.), located 2 miles within Passe du Nord, is composed of sand and covered with small bushes. Range lights, in line bearing 050°, are shown from the island.

Basse Amedee, with a shoal depth of 2.7m, lies about 0.5 mile WNW of Ile Amedee.

Recif Tabu, which is awash, lies about 1 mile WSW of Ile Amedee. A light is shown from the E side of Recif Tabu.

About 1.5 miles N of Ile Amedee are Les Quatre Bancs de l'Ouest, which dry from 0.6 to 0.9m, and an extensive group of reefs and shoals. Basse Thisbe, with a depth of 2.7m, located a little over 1.8 miles NNW of Ile Amedee, is the most dangerous. Patches, with depths of 9.4 to 9.9m, lie close E of the recommended track, 2.8 miles NNW of Ile Amedee.



Courtesy of South Pacific Online, <http://www.sponline.com>

Ile Amedee Light

Recifs Snark (22°26'S., 166°25'E.), which dry from 0.6 to 0.9m, lie on the W side of the recommended track, about 3 miles NW of Ile Amedee.

Petits Bancs (22°26'S., 166°26'E.), which dries from 0.6 to 0.9m, lies within 0.5 mile N of Recifs Snark.

Basse Garnault (22°24'S., 166°25'E.), 5.5 miles NNW of Ile Amedee, lies about 1 mile W of the recommended track to Noumea. It has a depth of 1.8m.

Ilot Maitre (22°20'S., 166°25'E.), which is wooded, is located a little over 2.5 miles SW of the S extremity of the peninsula on which Noumea stands. Ilot Maitre lies on the NW side of a reef which dries 0.6m on its NE side, and does extend about 1 mile SE from the island.

Ile aux Canards, located about 1.8 miles NE of Ilot Maitre, is low and wooded. A reef surrounds the island for a distance of 0.2 mile.

5.17 Passes de Boulari to Noumea.—Vessels bound for Noumea by way of Passes de Boulari proceed on a 050° course with the range lights mentioned above ahead in line; then follow the recommended track shown on the chart. When clear of Recif Tabu and Basse Amedee, steer with Ile aux Canards in line with Pointe Baggay ahead bearing 356°. Change course to 347° when the range lights shown from Ile Nou are in line on that bearing.

Passe de Dumbea (22°22'S., 166°15'E.) is an opening in the barrier reef between Grand Recif Abore to the S and Recif Mbere to the N. It is about 0.8 mile wide and the fairway is deep. Both sides of the entrance are marked by a lighted buoy. A vessel approaching Passe de Dumbea from seaward can fix its position by several unmistakable landmarks as indicated on the chart.

Recif Laregnere, on which the sea always breaks, lies about 3 miles within and NE of Passe de Dumbea.

Ile Nge, 1.5 miles E of Recif Laregnere, is located on a reef 1.5 miles in length. Several drying patches are reported to lie between Ile Nge and Recif Laregnere.

Ilot Te Ndu, located on a reef 2 miles N of Recif Laregnere, is composed of sand and covered with trees.

Recif Senez (22°18'S., 166°20'E.) is awash, and the seas break only on it in NW or SW winds. It is not visible when looking into the sun.

Tides—Currents.—In Passe de Dumbea the current is very strong and sets constantly to the W. When the wind is against the current, strong eddies accompanied by overfalls are produced.

Directions.—The approach channel from seaward through the pass is marked, and may best be seen on the chart.

From seaward, Ile de Freycinet ahead bearing 044° marks the first leg of the recommended track.

Passe de Uitoe (22°10'S., 166°06'E.) is 0.5 mile wide between the N extremity of Recif de l'Annibal and the SE extremity of Recif Tetembia, on which the sea breaks. The passage can be recognized by the breakers on either side. The principal landmark to be seen from the offing is **Mont Mou** (22°04'S., 166°21'E.), 1,211m high, sometimes enveloped in mist. Titema Peak, 360m high, is about 7 miles WSW of Mont Mou, and Karikate Peak, 234m high, is located about 2.5 miles WNW of Titema Peak. The peaks may not be distinguished until close in.

Cap Ka, the abrupt W end of **Ile Mathieu** (22°05'S., 166°06'E.), located 5 miles N of the passage, and the chain of wooded islets fronting Port Uitoe are also good landmarks.

Noumea (22°17'S., 166°26'E.)

World Port Index No. 57320

5.18 Noumea consists of Petite Rade, which fronts the town of Noumea and comprises the old harbor facilities, as well as Grande Rade, which has the new berthing complexes. The two harbors are separated by Ile Nou, and are joined by a small craft channel near their inner ends.

Winds—Weather

The Southeast Trades blow regularly from June to October. The winds are said to freshen with the sun, and reach a maximum around 1400 close to shore.

Tides—Currents

Information on currents and tidal currents in the reef passes and channels leading to Noumea are given in the respective channel descriptions.

The mean range of tide at Noumea is 0.8m, while the spring range is 1.1m.

In the roadstead, tidal currents are weak, setting N on the flood and S on the ebb. In Petite Passe, the flood sets ENE and the ebb WSW; currents are a bit more sensitive here.

Depths—Limitations

Petite Rade, approached from the SSE on the alignment of the Ile Nou range lights, is entered via Petite Passe, which has a least depth of 11m on the 055° range shown from Noumea. The commercial berths lie along the N side of the harbor, while the S side is comprised of a naval base, contained within a Prohibited Area, best seen on the chart. Ancien Quai, fronting the town, offers three berths. The largest berth offers a length of 149m, with alongside depths of 7 to 7.5m. Quai des Paquebots, at the N end of the harbor, has facilities for passenger vessels. It can accommodate vessels up to 170m long, with a

maximum draft of 9.5m, but has been reported (1998) to be 275m long, with a dredged depth of 11m alongside.

Grande Rade is approached by a recommended route, best seen on the chart. The N shore of this harbor is formed by Presqu'il Ducos, indented by several bays. Detached patches and spits extend from the N shore of the bay, and are best seen on the chart. The harbor's S shore is formed by Ile Nou. Banc des Japonais, with a least charted depth of 7.6m, lies up to 0.6 mile off Ile Nou's shore. Several other shoal patches and banks extend from the shore of the harbor, and may best be seen on the chart.

The approach from the harbor entrance to its head is marked by range lights, in line bearing 116°. The least depth shown on the range line is 10.1m.

Baie des Dames (22°14'S., 166°24'E.) offers two berths to vessels handling petroleum. A T-headed pier flanked by two dolphins offers berthing to vessels up to 100m in length and has alongside depths of 5.5m. A multi-point mooring, consisting of five mooring buoys, is situated at the bay entrance, and offers a berth to tankers with a maximum length of 200m and a maximum draft of 10.7m.

Baie Numbo (22°15'S., 166°25'E.), 0.5 mile SE of Baie des Dames, has a cement wharf situated on its E side and is utilized by vessels with a maximum length of 260m and a maximum draft of 9.7m.

Presqu'île Doniambo, 1.5 miles SE of Baie Numbo, has a quay at the nickel smelting works. Tankers, up to 260m in length with a maximum draft of 9.7m, use the NW end of the quay; the center of the quay has ro-ro facilities.

Anse du Tir, SE of Presqu'île Doniambo, offers berthing with alongside depths of 5m to coastal vessels.

Pointe Lambert Quay, immediately SSW of Anse du Tir, is 750m long and can accommodate vessels with drafts of 6.5 to 10.3m.

Aspect

An old lighthouse is situated on a 90m hill above the city. The cathedral, about 0.4 mile S, is a massive white structure with two towers, the SE of which is the front light of a 055° range, and is conspicuous. A passenger terminal building 0.6 mile WNW of the cathedral is conspicuous, as is a monument in the form of a cross of Lorraine, which stands on Mont Coffyn, 0.5 mile SSE of the cathedral. A prominent satellite antenna exists on Ile Nou, and is a useful landmark.

Pilotage

Pilotage is compulsory for the following vessels within the waters of New Caledonia:

1. All foreign vessels regardless of their length.
2. All French vessels more than 60m in length.

French warships are exempt from pilotage, as are pleasure craft less than 60m in length. Masters of pleasure craft less than 60m in length are advised to consider engaging the services of a pilot if unfamiliar with the area.

Pilotage for New Caledonia is centralized at Noumea, and may be ordered through Noumea (FJP) by cable only. Vessels proceeding to Noumea should order the pilot at least 24 hours in advance if using Canal de Havannah, or 12 hours in advance

if entering via Passe de Boulari. No guidelines have been published for ordering pilotage for tank vessels required to use Passe de Dumbea, but vessels are urged to send their request in advance of arrival.

Pilots will board 3 miles SW of Amedee Light if proceeding via Passe de Boulari, or 7 miles SW of Amedee Light if utilizing Passe de Dumbea. If transiting Canal de Havannah in daylight, the pilot will board off **Gorro Light** (22°19'S., 167°02'W.) or off **Port Boise** (22°21'S., 166°16'E.) by night. Pilot vessels here are black hulled with a white band, and are fitted with radiotelephone and VHF.

Regulations

See Pub. 120, Sailing Directions (Planning Guide) Pacific Ocean and Southeast Asia for regulations pertaining to vessels within the waters of New Caledonia.

Noumea is the first port of entry for New Caledonia. All trade, fishing, and pleasure craft are required to call here first. Vessels are obliged to send their ETA to the Harbormaster, Noumea, at least 24 hours prior to arrival. The pilot will gather the necessary information to grant free pratique, and the vessel will be boarded at the pier; otherwise, the vessel will not be permitted to berth.

Vessels arriving from areas infested with rhinoceros beetles are subject to special quarantine regulations; the local authorities should be consulted for details.

Tank vessels intending to navigate the waters of New Caledonia, or in distress and within 50 miles of New Caledonia, are governed by special regulations.

A copy of the current harbor regulations may be obtained from the harbormaster's office on arrival.

Vessels carrying explosives or dangerous cargoes must inform the pilot, and await the decision of the harbormaster. Vessels are prohibited from using their whistles or sirens between the hours of 2220 and 0500.

Signals

Noumea (FJP) offers full radio services 24 hours. The harbormaster's office and the pilot office may be contacted on 2182 kHz, or VHF channel 16. The normal office hours for both the pilot and harbormaster are 0730 to 1100 and 1330 to 1730, but the pilot office may be contacted 24 hours on VHF channel 16.

Storm signals are displayed from the old signal station mentioned above, and consist of the following:

1. Black ball—Port threatened by a storm with a mean wind speed possibly reaching 33 knots or over, with an E component.
2. Two black balls—Port area threatened by a storm with a mean wind speed reaching 33 knots or over, with a W component.

Anchorage

Mouillage de Ndie (22°15'N., 166°24'E.), on the N side of Presqu'île Ducos, functions as the quarantine anchorage for the port. Anchorage may be had between **Ile de Freycinet** (22°14'S., 166°24'E.) and Ile Ndie, 0.8 mile NE of it, in depths



Courtesy of South Pacific Online, <http://www.sponlinee.com>

Noumea—Pointe Lambert Quay

of up to 16m, mud, clear of the foul ground 0.3 mile ENE of Ile Freycinet.

Outside the port, anchorage may be taken 1.5 miles N of Ile de Freycinet in depths of 8m, mud, sheltered from all but SSW winds. Winds from the S and SE raise a chop here. Anchorage is also available S of Ile Nou, in depths of 9 to 20m, bottom quality not stated.

If approaching Petite Rade at night, temporary anchorage may be had, in depths of 12.4m, bottom quality not stated, with the N end of Ilot Brun bearing 265°, 0.3 mile distant. Anchorage may be had anywhere within Petite Rade, in depths of 8 to 13m, good holding ground, except within the charted prohibited anchorage areas, but anchorage berths here are assigned by the harbor master.

Anchorage in Grande Rade is better than that available in Petite Rade, and it also offers hurricane shelter. Caution is advised, however, as the NE portion of the harbor is encumbered with coral heads. The bottom is foul with obstructions on the S side of Banc des Japonais.

Directions

See the descriptions for Canal de la Havannah ([paragraph 5.6](#)), Passe de Boulari ([paragraph 5.14](#)), Passe de Dumbea ([paragraph 5.17](#)), and Canal Woodin ([paragraph 5.12](#)) for directions and information on the approaches to Noumea. Tank

vessels should also keep in mind the special regulations applying to them when approaching or sailing within 50 miles of New Caledonian waters. Also keep in mind that pilotage for all the waters of New Caledonia is compulsory.

5.19 Baie Maa (22°13'S., 166°20'E.), which indents the W side of Maa Peninsula, affords anchorage sheltered against E winds. The bottom is sandy, but many coral heads exist, especially in the S part.

Port Laguerre, 2.5 miles NW of Baie Maa, is sheltered on its W side by Ilot Te Ndu, and is open to the S. The NE arm of the bay is shallow and receives two rivers.

Mont Kouï (22°08'S., 166°18'E.) 441m high, in line with the W hill on the small peninsula just E of Port Laguerre, bearing about 354°, clears the shoal water extending WNW from the SW extremity of Maa Peninsula.

Anchorage, protected from all but S winds, may be obtained ENE of the N end of Ilot Te Ndu, in 8m, soft mud.

5.20 Port de Uïtoe (22°06'S., 166°09'E.) is situated upon the E side of Presqu'île de Uïtoe, a striking peninsula. Ile N'dukue and Ile Mathieu lies close SW of the peninsula. A reef projects 2.8 miles ESE from Ile N'dukue across the entrance of the port, upon which lie Ile Mbe, Ile Abu, and Ilot Moro.

Recif No, easily seen at LW, lies about 1.8 miles SE of Ilot Moro. Recif No is joined to Recif Mamaora, which projects

about 0.6 mile SW from a point on the coast, about 1 mile E, by a shallow ridge. Recif Ti lies about 1 mile SW of Recif No.

The SW side of Ile Abu, in line with the V formed by Pointe Kauritio, the S end of Presqu'île de Uitoë, and the N end of Ile N'dukue, bearing 308°, leads midway between Recif Ti and Recif No.

A patch, which dries, with a shoal having a depth of 3m close N, lies about 0.8 mile SW of Ilot Moro.

Vessels with local knowledge can obtain good anchorage in Port de Uitoë, as charted, in depths of 7 to 11m, good holding ground. This anchorage is approached from either the S or W, rounding Ilot Moro at a safe distance.

Recif du Prony, which dries 1.5m in its E part, lies 2.25 miles SSW of **Pointe Bovis** (22°14'S., 166°21'E.), the S end of the Maa Peninsula. An islet, 1.3m high, lies on the W part of Recif du Prony. Basse Kauï, with a depth of 0.6m, lies 2 miles SW of Pointe Bovis. A reef, whose position is approximate, lies about 0.5 mile S of Basse Kauï.

Ilot Ndue and Ilot Ie, with Recif Ndaru and Recif Numbea between, lie upon a reef about 5 miles WNW of Pointe Bovis. Ilot Tangué (Ilot Iange) lies about 1.8 miles NNE of Ilot Ndue; the channel between is narrowed by shoals projecting from either side.

Ilot Mbo and Ilot Mba are wooded islets lying on the SW side of the fairway between Port Noumea and Passe de Uitoë, about midway between Ilot Ndue and the barrier reef SW. In 1976, less water than charted was reported 2.3 miles NW of Ilot Mba.

Directions.—Vessels with local knowledge departing Noumea from Grande Rade, round Ile Nou and set a course for **Pointe Bovis** (22°14'S., 166°21'E.). When in the vicinity of Pointe Bovis, about 0.5 mile off, steer 302° for Cap Ka, passing through the fairway between Ilot Ndue and Ilot Tangué (Ilot Iange), and between Recif Ti and Recif No, up to the entrance of Port Uitoë. Approaching Recif Ti, the vessel should follow the leading line described above and, if continuing to Baie de Saint Vincent, should adhere to this line until Cap Ka and the S end of Ile N'dukue comes into line bearing 298°. This alignment leads between Ilot Moro and the 1.5m patch 0.75 mile SW; when the buoy marking the patch is abeam, change course abruptly WSW for 0.6 mile until the SW end of Ile Hugon is in line with the NE end of Ilot Ronhua, bearing 300°. This course leads to the entrance of Passe du Cap Ka between Cap Ka and Pointe Guillois, the SE end of **Ile Hugon** (22°03'S., 166°03'E.).

5.21 Passe de Uitoë (22°10'S., 166°06'E.) entrance is between the SE end of Recif Tetembia and the NW end of Recif de Annibal, is easily discernible, as the sea breaks over the reefs.

Aspect.—The main landmarks from the offing are Mont Mou; Piton Karikate, and Titema Peak, 360m high, 2.5 miles ESE of Piton Karikate, all described in [paragraph 5.17](#). From the passage, Cap Ka, a chain of wooded islets S of Port de Uitoë, Ilot Mba, and Ilot Mboa, are all good marks.

A shoal, with a depth of 7.4m, marked by a buoy, lies about 0.5 mile ESE of the S end of Recif Tetembia. The sea during a SW swell has been seen to break on this shoal.

Directions.—Vessels approach the entrance of Passe de Uitoë with the E summit of Mont Mou in line with Sommet

Titema, bearing 065°. Vessels should remain S of the center of the passage and avoid the above shoal. When the breakers on the S side are abeam, vessels should steer for the N summit of Ile Nou, bearing 107°. If bound for Noumea, remain on this bearing until between Pointe Bovis and Basse Kauï, where course can be changed as required. This track leads over the area in which less water than charted was reported in 1976, NW of Ilot Mba, and over a 11m patch 1 mile NNE of the same islet.

Baie de Saint Vincent to Baie de Bourail

5.22 Baie de Saint Vincent (Baie du Sud), entered between Cap Ka and Ile le Predour, almost 8 miles NW, is a broad bay fronted by many islands. The water within the bay is so muddy that shoals cannot be seen and vessels must rely on bearings and ranges to avoid them.

The shores of the bay are very irregular, forming several smaller bays which can only be used by small craft. There are large open areas in the S part of the bay with depths of 9 to 25m.

Aspect.—Ile Mathieu, Ile Hugon, Ile Ducos, and Ile le Predour are the most prominent islands of those that extend across the entrance of Baie de Saint Vincent.

Dent de Saint Vincent, 1,545m high, is a sharp peak lying about 14 miles NNE of Cap Ka. Mont Do, a rounded summit, 1,036m high, lies 12.5 miles N of Ile le Predour. The aero light on Set N'dui, S of the Tontuta River, is visible from sea.

Caution.—The inner passage between Passe de Saint Vincent and Passe d'Ovarai has been surveyed, with changes to hydrography and recommended routes. Vessels should not attempt to enter this area without local knowledge.

5.23 Passe de Saint Vincent (22°02'S., 165°58'E.) represents an opening in the barrier reef lying about 11.5 miles NW of Passe de Uitoë. This passage can be identified in good weather by bearings of Dent de Saint Vincent and Mont Do. Ilot Tenia, which lies on the barrier reef, about 0.8 mile from the NW side of the passage, is wooded and is a good mark for identifying the passages location.

Canal Hugon, lying between Ile Ducos and Ile Hugon, has depths ranging from 0.3 to 9m. A reef, upon which the sea breaks, and a sand cay lie between Canal Hugon and Passe de Saint Vincent. A shoal, with a depth of 9m, lies about 2 miles W of the W end of Ile Hugon. Ile Ronhua lies upon a reef 0.6 mile off the SW side of Ile Hugon.

Canal Ducos, deep and 0.4 mile wide in the fairway, lies between Ile Ducos and Ile le Predour. A patch, with a depth of 5.5m, lies about 2 miles SW of Pointe Arch d'Alliance, the NW end of Ile Ducos. A 9m patch lies on the recommended track in the entrance to the passage about 2.5 miles SW of the same point. Vessels with local knowledge can obtain anchorage in Baie du Sud, which lies between Presqu'île de Uitoë and Ile Hugon. The recommended berth is in a depth of 11m, sand and mud, about 0.5 mile N of the NE end of **Ile Mathieu** (22°05'S., 166°07'E.).

Baie Centrale lies E of Ile Hugon and Ile Ducos. Vessels with local knowledge can obtain anchorage here, in depths of 6 to 7m, about 1 mile SE of **Ile Geoffroy** (22°00'S., 166°07'E.).

Baie du Nord, lying in the NW part of Baie de Saint Vincent, is divided into a W arm, Baie Arembo, and a N arm, Baie de Deama. Vessels with local knowledge may obtain anchorage in

Baie du Nord, as the bottom is soft mud, holding ground excellent. Anchorage may be found in the entrance to Baie Arembou, W of Recif Toyaghi.

Directions.—Vessels should not enter Passe de Saint Vincent without local knowledge. Vessels from the S approach Passe de Saint Vincent with Mont Do, bearing 112°, and enter with Dent de Saint Vincent in line with Pointe Arche d'Alliance, the NW end of Ile Ducos, bearing 054.5°, which leads in mid-channel to the entrance of Canal Ducos.

Vessels with local knowledge bound for Baie du Nord from the SE pass either S of the islands fronting Baie de Saint Vincent or pass inside the barrier reef entering Passe du Cap Ka. From Passe du Cap Ka, pass E of Ilots Trio. When the N and S islets of Ilots Trio are in line, astern, steer for the S hill on Ile Parseval, bearing about 007°, leading between two patches of discolored water lying about 1 mile N and 1 mile NNE, respectively, of the N Ilots Trio. This course leads between Recif Marceau and the E side of Ile Ducos. From a position N of Recif Marceau vessels should pass close along the NE shore of Ile Ducos so as to avoid the drying reef lying 0.2 mile N of the NE end of the island. When **Presqu'île Beaupre** (21°57'S., 166°05'E.), lying on the E side of Baie de Deama, opens W of Ilot Devarenne, lying 0.75 mile WNW of the S end of Ile Parseval, vessels should change course N and head to pass very close W of Ilot des Morts to avoid Recif du Cher, with a depth of 2.1m, lying about 0.3 mile W of Ilot des Morts.

5.24 Baie de Pritzbuier (21°57'S., 165°57'E.), fronted by Ile Le Predour, Ile Puen, and Iles Testard, is the next indentation NW of Baie de Vincent. This bay may be approached from either N or S of **Ile Le Predour** (21°59'S., 166°00'E.). From the NW there is a channel between Iles Testard and Ile Quernel, with a least depth of 4.2m in the fairway.

A rock, with a depth of less than 1.8m, was reported to lie near the channel SW of Iles Testard, about 0.6 mile SW of the rock off the SE end of that island. A shoal, with a depth of 4.2m, lies 0.7 mile SW of the SE end of Iles Testard.

Vessels with local knowledge can obtain good shelter in Baie de Pritzbuier, which lies 1 mile NE from NW end of Ile Puen.

When entering the bay from the W, Pointe Moziman should be given a berth of about 0.3 mile to avoid the spit extending SE from Ile Testard.

Directions.—The route between Ilots Champignons and Passe de Saint Vincent is not recommended nor described due to the lack of hydrographic data in this area.

From Passe de Saint Vincent, vessels with local knowledge intending to head NW to Baie de Pritzbuier or to Passe d'Isle should, after rounding the reefs extending E from Ilot Tenia, keep the NE end of **Ile Isie** (21°54'S., 165°52'E.) in line with the W summit of Sommet Ouanvo, bearing about 316.5°. When Pointe Moziman, the NW end of Ile Puen, bears 090°, vessels should head for the summit of the SE of Iles Testard for a distance of about 0.5 mile, to avoid the sunken rock lying 0.6 mile SW of the rock off the SE end of that island. When the rock off the SE end of Iles Testard is in line with Piton Kari, bearing about 043°, vessels should change course W and resume the 316.5° alignment, which leads between Iles Testard and Banc du Curieux. When the S summit of Ile Quernel bears

101°, vessels should change course W, and after passing between Recif du Milieu and the buoy moored off the NW end of Banc du Curieux, vessels should keep the S summit of Ile Quernel astern, bearing 101°, which leads close N of the buoy, then S of Ile Isie and the off-lying reef, and then to Passe d'Isie.

5.25 Passe d'Isie lies about 13.3 miles NW of Passe de Saint Vincent, and it is deep, 0.5 mile wide, and generally free of known dangers. The wreck of a vessel stranded on the coastal reef, about 1 mile S of Passe d'Isie, was reported prominent both visually and on radar.

Passe d'Ouarai, lying 3 miles NW of Passe d'Isie, is also deep and about 0.5 mile wide. When within this channel entrance, coral patches and sand, which comprise the bottom, will be plainly seen.

Mount Do is a good landmark from a considerable distance for either of the two above passages.

Sommet Ouanvo (21°51'S., 165°49'E.), on which there is a beacon, and the peninsula on which it stands, can be made out from the offing. This peak should not be confused with Ile Libris, 3.25 miles NW, which it resembles.

Ile Isie (21°54'S., 165°51'E.), on which there are two rounded hills, lies about 4 miles NW of Iles Testard, and is conspicuous. The islets of Konduyo and N'digoro, both wooded and prominent, lie 4 miles and 7 miles WNW, respectively, of Ile Isie.

Meleo Cone, 101m high, 0.75 mile ESE of Sommet Ouanvo, is a conspicuous mark.

Directions.—Vessels with local knowledge heading for Passe d'Isie should steer for Mont Do, bearing 058°, which will lead to the entrance; however, before entering vessels should bring Meleo Cone to bear about 059.5° which leads through the entrance.

Vessels bound for Passe d'Ouarai should keep Mont Do in line with Mont Ouinne, 4.75 miles WSW, bearing 069°, which will lead to the entrance. To enter, keep the summit of Ile Lebris in line with Mont Me Fombiru, 5 miles NE, bearing about 043.5°.

5.26 Baie d'Ouarai (21°46'S., 165°45'E.), which lies at the NW end of the inner waters N of Passe d'Ouarai, is sheltered on the W by a reef projecting about 6 miles SSE from the shore.

Vessels with local knowledge can obtain anchorage in depths of 7 to 14m, about 2 miles NNW of Ile Lebris. During bad weather, a small vessel might obtain a good berth, in a depth of 5 to 7m, mud, N of **Ilot Teremba** (21°47'S., 165°44'E.). At this anchorage, SE winds are reported to cause a heavy short sea.

Directions.—Vessels with local knowledge, after having entered the barrier reef through Passe d'Ouarai, intending to enter Baie d'Ouarai should continue on the range, described above, passing between the beacon marking the edge of the reef extending from the S side of Ile Lebris and the S end of the 0.5m shoal on the W side of the fairway. From this position course may be shaped as required into the bay.

The shoals extending S from Ile Lebris may also be avoided by not allowing Ile Hugon to open NE of Ilot Konduyo until Ilot Gero, lying close off the NW point of Ile Lebris, is open W of that island. At this point, vessels should steer for Ilot Gero until abeam of the S end of Ile Lebris, when they should steer

for the anchorage passing to the E of the buoy marking the W side of the fairway abreast Libris Island.

The shore NW of Baie d'Ouarai to Baie Moindu is fronted by a reef that extends up to 4 miles offshore in places. Two wrecks lie on the edge of the reef, about 4 miles and 5 miles WNW of Passe d'Ouarai. It was reported only one of these wrecks was visible.

5.27 Baie Moindu (21°44'S., 165°40'E.) is entered through Coupee Mara, a narrow opening in the reef about 6 miles NW of Passe d'Ouarai. Coupee Mara, which should only be used by vessels with extensive local knowledge, has depths of over 9.1m in the channel for a distance of about 2.5 miles from the entrance to the passage.

Small vessels with extensive local knowledge can obtain anchorage, in depths of 5 to 8m, mud, N of the narrowest part of the channel. This anchorage is in a position with the S end of **Ilot Kundogi** (21°48'N., 165°42'E.) lying on the reef nearly 4 miles ENE of the entrance to Coupee Mara, bearing about 128°, just open SW of the SW end of **Ile Mara** (21°47'S., 165°41'E.), lying 2.5 miles E of the cut.

Larger vessels, with local knowledge, can find anchorage, in a depth of about 20.1m, mud, with the summit of Ile Mara bearing about 090°.

The sea is always calm in the bay, but in Mara Cut there is generally a swell and at times a tidal bore. Through the S part of the bay, except after a heavy rain, the line of demarcation between the sand and coral reef, and the deep water over a sandy bottom, is always visible.

Several miles up the Moindu River, which discharges into the head of the bay, is the town of Moindu.

Directions.—The navigation of Coupee Mara requires extensive local knowledge and great caution. The cut's entrance is approached on a course of 037°, which leads through the narrows towards a breaking reef located about 0.5 mile within the entrance. When about 0.3 mile from this reef alter course rapidly to about 338°, so to clear the elbow of the reef N of the breakers on the E side of the channel. Then follow the edge of the shoals, avoiding the 1.2m rock lying about 0.8 mile within the cuts entrance, on the E side of the 338° course. Having cleared the rock, alter course to 030° and follow it until the S end of Mara Island bears 090°; then steer 020° until the N end of Ilot Kundogi is in line with the S end of Ile Mara, bearing 115°, when course may be shaped for the anchorage.

The coast between Coupee Mara and the entrance to Baie de Bourail, about 15 miles NW, is fronted by a reef within which is a lagoon encumbered by coral heads.

5.28 Baie de Bourail (21°38'S., 165°26'E.) is a spacious harbor with depths of 73m in the entrance, decreasing gradually to about 10m, about 0.5 mile from the bays head. A heavy swell runs into the bay with winds from the SW. Vessels loading ore via lighter anchor here.

Aspect.—The entrance to Baie de Bourail may be identified in good weather by heading for Table Ounio, 1,006m high, bearing 072°. This peak stands 14 miles NNE of Ile Mara. When close in, Sommet Nekou, 486m high, and Mont Nepourou, 537.1m high, lying about 1.5 miles N and 3 miles E, respectively, of the white beacon at the head of the bay, are conspicuous.

Ilot Siande (21°40'S., 165°27'E.), lying on the E side of the coastal reef, is wooded and makes a good mark for entering the bay.

N'diadiou Bluff lies on the E side of the entrance and between it and another bluff, 64.9m high, about 0.8 mile NNW, is the entrance to Baie N'diadiou, a narrow inlet usable only by small craft.

Pointe Akaia is the N end of the N bluff, ending in a cliff. A prominent tree stands on the S slope of the 64.9m summit SE of Pointe Akaia.

Pointe Mediema, on the W side of the entrance, is backed by Mont Mediema, 304.8m high, on the summit of which is a white house.

Vessels with local knowledge can obtain anchorage virtually anywhere in Baie de Bourail, but the NW part is preferred. The best anchorage lies with Pointe Akaia bearing 128° in a depth of 10m. Vessels entering the bay to load ore anchor on the intersection of the white house and beacon, in line bearing 008°, and the two white beacons on Pointe Akaia, in line bearing 104°, in a depth of 13m.

There are two mooring buoys close WNW of Punta Akaia.

Directions.—There are no dangers in the entrance to Baie de Bourail, save the reefs projecting up to 2 miles from the shore. Vessels with local knowledge enter with Summit Nekou bearing 010°, which leads nearly midway between the reefs. Vessels approaching from the N should steer for the cliff on Pointe Akaia, bearing 036°, until Sommet Nekou bears 010°.

Cap Goulvain to Baie de Gomen

5.29 The shore between Baie de Bourail and Cap Goulvain, about 11 miles WNW, is reef-fringed. Coupee du Cap Goulvain, entered about 2.5 miles W of Cap Goulvain, has not been surveyed.

Baie de la Poya, entered by a channel between the reefs, is only usable by small vessels with extensive local knowledge, as it is encumbered with reefs and shoals. The shores of this bay are bordered by cliffs on either side, and on the E point of the bay are 2 ore loading facilities and an iron hut, both visible from sea. Pic Adio, 752m high, located about 14 miles N of Cap Goulvain, is a good landmark. This peak bearing about 056°, leads to the entrance of Baie de la Poya.

Tankers up to 30,000 dwt, with a maximum length of 170m, can anchor, in 36m, at the intersection of the ranges.

Ilot Contrariete, low and wooded, lies about 1 mile S of the E side of the coastal reef forming the entrance of Baie de la Poya.

5.30 Port de Moueo (21°20'S., 164°59'E.) entered through Passe de Moueo, a tortuous channel, is separated from Baie de la Poya by Presqu'île Beco and the reef extending SW from it. The pass, which requires local knowledge, is traversed by a channel dredged to a depth of 9m.

Depths—Limitations.—An ore terminal pier extends 366m S from the SW point of Presqu'île de Moueo; a dolphin berth with a depth of 10m lies at the end. Six mooring buoys lie close S of this pier. Ore carriers up to 148m long and tankers up to 100m long can be accommodated. The tanker terminal can accept vessels up to 163m long, with a maximum draft of 8.2m. The liquefied gas terminal can accept vessels with a maximum draft of 4.5m.

There is a pier, about 259m long, with a depth of 7m alongside, on the N side of the point located about 1 mile NNE of **Recif de l'Observatoire** (21°21'S., 164°58'E.). The pier is reported to be in a bad state of repair.

Aspect.—Good landmarks for identifying Port de Moueo from the sea are Pico Adio; Aiguille de Muco, 12 miles NW of Pico Adio; Ilot Contrariete; and Cap Goulvain.

Ile Grimoult, 45m high on its E side, lies on the E side of the fairway, about halfway between Passe de Moueo and the head of the bay.

Pico Adio, 752m high, located about 14 miles E of Port de Moueo, stands between two high mountain ranges, the one to the N presenting an almost perpendicular side.

To the NNE of Port de Moueo, between Mount Hilo and Mount Pacua, is Mueo Needle, a slender peak standing on a slightly rounded mountain. Another peak, smaller and less pointed, is located to the E of Mueo Needle. A group of five radio towers stands on the W side of the Presqu'île Nepoui, about 1.1 miles N of the S extremity; they form a most conspicuous mark. A light is shown from a pylon close W of the radio towers.

Pilotage.—Pilotage is compulsory. Arrangements for a pilot should be made at Noumea.

Anchorage.—An area suitable for anchorage is located between the parallels of the S end of Ile Grimoult and the S end of the Moueo Peninsula. This area has been dragged to a depth of 7.9m; the berths are restricted to vessels drawing less than 7.3m. The holding ground is good, and the inner berths are protected, but the outer berths receive shelter only from the reefs and shallow areas.

Anchorage can be obtained, in depths of 6 to 9m, in the SW part of the bay in Baie de Nepoui, N of the pier. A spit, with a depth of 1.7m, projects 0.3 mile SW from the E entrance of Baie de Nepoui. A buoy marks the edge of the spit.

Directions.—Port de Moueo should not be entered without local knowledge.

A vessel should approach Passe de Moueo with the beacons on Presqu'île de Beco and **Ilot Didot** (21°23'S., 165°01'E.) in line bearing 072°. When the light on the N extremity of the reef on the S side of the entrance bears about 150°, alter course to about 092° passing between Buoy No. 1 and Buoy No. 2, which mark the entrance to the buoyed channel. An E course should be then be maintained in the buoyed channel until the range lights on the reef extending SW of Ile Grimoult come into line bearing 031°, ahead, when they should be steered for. This alignment should be maintained until the front lighted beacon is 0.2 mile distant, when course should be altered to bring Observation Rock, at the SE end of Nepoui Peninsula, bearing 343° ahead. About 0.3 mile after passing the beacon marking the edge of the fringing reef on the W side of Ile Grimoult, course should be altered to bring the tower on Presqu'île de Moueo ahead, bearing 024°, at night keeping within the white sector of the light on the pier between the bearings of 018° and 034°, anchoring thereafter as convenient.

The location of Passe du Moueo is sometimes difficult to determine, particularly in the morning and when the mountains are obscured by clouds. Under ordinary conditions the navigation of the pass presents no difficulties to a vessel carrying ample steerageway, but with winds from the SW and a heavy sea running in, it should not be attempted.

Vessels with a draft of more than 7.9m should not enter before half-flood. Due to the strong tidal currents in the entrance and the numerous dangers, vessels should follow the buoyed channel. From Presqu'île Nepoui to Passe de Pouembout, about 13.5 miles NNW, the shore is reef fringed inside which only small vessels with local knowledge can navigate.

Caution.—A 6.4m patch lies at the inner end of Passe de Moueo, about 0.3 mile W of the outermost red channel beacon.

A rock, with a depth of less than 0.3m, lies 0.6 mile SSW of the W extremity of Ile Grimoult.

5.31 Passe de Pouembout (21°14'S., 164°45'E.) is the S channel of the two channels that lead to Baie Kataviti; the N channel is called Passe de Kone. Passe de Pouembout should only be used by vessels with extensive local knowledge, and Passe de Kone is not recommended as it is encumbered by rocks, the channel is tortuous, the tidal currents are strong, and there is a swell at the entrance.

Aspect.—Montagne de Kone, 237m high and wooded, lies about 15 miles NE of the entrance to Passe de Pouembout. This peak, in line with Mont Uinip, 15 miles NE, bearing 045°, leads to the entrance of Passe de Pouembout. Near the center of this channel is a reef, S of which is the navigable channel. The summit of **Table de Tiea** (21°10'S., 164°55'E.), bearing 065°, just clears the NW edge of the reef on the S side of the channel.

Ilot Koniene (21°09'S., 164°49'E.) lies close offshore E of the center of Plateau de Koniene. A reef, which dries, lies on the E side of the channel, about 2 miles SW of the islet.

Presqu'île de Foe is a conspicuous headland located about 3 miles NNW of Ilot Koniene.

Vessels with local knowledge can find anchorage, in depths of 5 to 7m, mud, with the W end of Presqu'île de Foe, Morne de Foe, bearing 087°, distance 1.5 miles; the holding ground here is poor.

Directions.—Vessels with local knowledge enter heading for the 418m summit of Table de Tiea, bearing 065°, until the black beacon on the reef located about 2.3 miles SSW of Ilot Koniene is in line with the N peak on Ilot Koniene, bearing 031°, when she should keep on this alignment until the W end of Presqu'île Foe bears 004°, and is in range with the W detached summit of Massif de Koniambo, which is 504m high, located about 4.5 miles N of the W end of Presqu'île Foe. Remain on the 004° course until the N peak of Ilot Koniene is in line with Le Piton, on the NW end of the same island, vessels should change course to keep this range bearing 152° astern, which leads through Seuil de Foe. From the entrance of Passe de Pouembout through Seuil de Foe to the anchorage, there was a least charted depth in the fairway of 4.8m.

5.32 Passe du Duroc (21°00'S., 164°37'E.) is located about 8 miles NW of Passe de Kone; it lies at the S termination of the navigable waters within the barrier reef at the NW end of New Caledonia. There is no passage for anything larger than small coasters within the reefs between Baie Kataviti and Passe du Duroc.

The entrance to Passe du Duroc lies between the NW end of Grand Recif de Kone and the E end of Grand Recif de Gatope, with a least width of about 0.4 mile. This channel should not be entered without local knowledge.

Aspect.—Sommet Pouani, 220m high, is the summit of **Presqu'île Guillain** (20°59'S., 164°40'E.).

Mont Katepahic, 649m high, dark, with jagged sides and a flat top, lies 4 miles NE of the NW end of Presqu'île Guillain. Piton de Kafeate, 227m high and shaped as a sugarloaf, lies about 5.8 miles SE of Mont Katepahic.

Directions.—Vessels with local knowledge entering Passe du Duroc should keep Mont Katepahic, bearing 048°, just open NW of the NW end of Presqu'île Guillain until just within the SE end of Grand Recif de Gatope, when vessels should change course NNE staying in mid-channel.

Anse de Vouavouto (21°00'S., 164°40'E.), located along the S side of Presqu'île Guillain, is entered between Pointe Vincent and Pointe Vouavouto, about 1 mile SE. Chenal Frot, which leads into this cove, is narrow, tortuous, and requires extensive local knowledge for use. This buoyed channel is available to vessels with drafts to 7m, and the water within it is so discolored as to prevent the edges of the reefs being seen. There is a depth of 11m in the anchorage, about 0.6 mile W by S of Pointe Vincent.

Directions.—Vessels with extensive local knowledge bound for Anse de Vouavouto should keep the range for entering Passe du Duroc in line until the black beacon on the N edge of Recif de Kone bears about 135°, when course should be changed to 128° and pass between the buoys. When the pyramidal beacons on the S side of Presqu'île Guillain are in line bearing 067°, change course NE and keep on this alignment which will lead to the entrance of the cove.

5.33 Baie Chasseloup (20°58'S., 164°38'E.) lies NW of Presqu'île Guillain and is protected from all winds by Grand Recif de Kone on the S, Grand Recif de Gatope on the W, and Plateaux des Massacres on the NW. A white house, standing at the foot of **Mont Katepahic** (20°56'S., 164°42'E.), and a white pyramidal beacon, on the N side of Presqu'île Guillain, are both conspicuous.

LeGrand Ronfleur, with a least depth of 0.2m, lies on the E side of Passe du Duroc, centered about 0.8 mile NE of the NW end of Grand Recif de Kone. This coral patch, which forms the N side of Chenal Frot, has buoys marking its S limits.

Anse de Pouaco indents the N part of Baie Chasseloup, and from its W entrance point a mud bank, fringed by coral, extends about 0.5 mile S.

Vessels with local knowledge can obtain good anchorage, in a depth of 5m, mud, with the E summit of **Ilot Gatope** (20°59'S., 164°39'E.) in line with Pointe Giboudot, the W end of Presqu'île Guillain, bearing 182°, about 0.3 mile offshore. Anchorage may be found in a similar depth S of Anse de Pouaco; however, it is subject to a choppy sea which comes in with the prevailing SE wind.

Chenal Pouangue (20°56'S., 164°34'E.) lies between Plateaux des Massacres and Grand Recif de Gatope, and joins Baie Chasseloup with the inner waters NW of it. It is the only channel within the barrier reef through which a vessel can head N and should only be used by vessels with extensive local knowledge. Navigation is dangerous in Chenal Pouangue at HW if the beacons are not in position and if the sun is dead ahead, because the sides of the reefs cannot be made out.

Aspect.—Prominent mountains lying NW of Baie Chasseloup include **Piton Tsiba** (20°48'S., 164°29'E.), 470m high and

conical with a pointed peak, 14 miles NW of the NW end of Presqu'île Guillain, and about 2 miles inland; Mont Ouala (Mont Uala), 578m high, about 1.5 miles N of Piton Tsiba; Mont Ouazangou (Mont Uazangu), 584m high, 2.25 miles farther N; and Pic Homedeboua, 1,200m high, about 3 miles NE of Mont Ouazangou. This mountain is separated from Pic Homedeboua by a deep gap which is distinctive from Grand Recif de Gatope.

5.34 Coupee de l'Alliance (20°57'S., 164°25'E.) is a opening in the barrier reef about 0.2 mile wide that lies about 11 miles WNW of Passe du Duroc. It is entered between the NW end of Grand Recif de Gatope and the SE end of Recif Mathieu.

Tides—Currents.—Tidal currents in Coupee de l'Alliance are often very strong, but they set directly in or out of the cut.

Baie d'Ounda (20°52'S., 164°29'E.) is located between Pointe d'Ounda and the NW side of Plateaux des Massacres.

Recifs Peterson, which lies on the E side of the approach, is located about 3.5 miles SE of Pointe d'Ounda. Recif d'Ounda lies on the W side of the approach, about 1.5 miles SSW of the same point.

Directions.—Vessels with local knowledge using Coupee de l'Alliance to reach Baie d'Ounda head for Pic Homedeboua bearing 027°, until about 0.3 mile SW of the SE end of Recif Mathieu, when course should be changed to about 061° to pass through Coupee de l'Alliance. Once clear of the SE tip of the reef, the 027° course may be resumed passing midway between Recifs Peterson and Recif d'Ounda in a least depth of 8.2m. The edges of the above reefs show up fairly well.

A tall chimney stands about 1 mile NE of Pointe d'Ounda. A pier extends SW from the point.

Vessels with local knowledge can obtain anchorage, in depths of 7 to 9m, sand and mud, about 0.5 mile S of the pier. Alternately, anchorage may be found close NW of the NW side of Plateaux des Massacres in depths of 6 to 7m, mud.

From Pointe d'Ounda the coast trends 7.5 miles in a NW direction to Cap Deverd, the S entrance point of Baie de Gomen. The shore is fringed by a reef, but the fairway of the inner route is 1 mile or more from it and presents no special difficulties. A small pointed hill stands near the coast, about 2.5 miles NW of Pointe d'Ounda, and Teudie Peak, 132m high, stands on Cap Deverd. Deverd Islet, located 2.5 miles W of Cap Deverd, is wooded.

Vessels with extensive local knowledge proceeding W inside the barrier reef from Baie Chasseloup, from a position about 1 mile WNW of Ilot Gatope, should keep Piton de Kafeate in line astern with the W peak of **Ilot Gatope** (20°59'S., 164°39'E.), bearing 120°. Proceed on this bearing along the NE edge of Grand de Recif Gatope, until Mont Katepahic is in range with the S end of the point on the E side of the entrance to Anse de Pouaco, bearing 076°, when course should be altered W to avoid several patches, with depths ranging from 4 to 5m, lying 1.5 miles SW of the W entrance point of Anse de Pouaco. Vessels should then proceed through Chenal Pouangue in mid-channel, being guided by the beacons. In 1976, there was a least charted depth of 5m on this above track and there was deeper water S of the track. On leaving this channel, vessels should follow the S edge of Plateaux des Massacres at a moderate distance, and steer to pass between the beacon

standing on the SW edge of the plateau, about 3.3 miles SSE of Pointe d'Ounda, and Recifs Peterson, taking care to avoid the patch with a depth of 4.8m, 0.75 mile SW of the beacon. Then the vessel should steer for a small pointed hill close to the coast, about 2.5 miles NNW of Pointe d'Ounda, bearing 340°, until the pier on Pointe d'Ounda is in line with Piton Tsiba, bearing about 019°, when vessels should steer with Sommet Teoudie, bearing 324°, until the small pointed hill is in line with Piton Tsiba, bearing about 073°. Then steer for Ilot Deverd, a wooded islet lying about 2.5 miles WSW of Cap Deverd, bearing 298°, which leads between Les Quatre Soeurs (Four Sisters) and another reef lying S of Cap Deverd, about 1.3 miles NE. When the small hill close within Pointe d'Iouanga (Iuanga), located about 3 miles N of Cap Deverd, bears 001° and is open W of that cape, vessels should steer 338°, and pass about 0.8 mile SW of Recif Teoudie, marked by a black beacon on its SW side, about 1.3 miles S of Cap Deverd. If bound for Baie de Gomen, vessels may round Cap Deverd at a distance of 0.5 mile. A 8.6m patch lies 0.7 mile SW of Cap Deverd. A 6.6m patch lies 1.5 miles SW of the Cape.

If bound NW, the vessel may proceed through Chenal de la Fine, which has a least depth of 4.9m, or through Chenal de Kendec and then SW of Recif de l'Infernet.

5.35 Passes du Coetlogon (20°43'S., 164°14'E.) is comprised of two channels separated by an extensive reef; the N is Passe de Koumac, the S, Passe Deverd. Grand Recif Mathieu, the section of the barrier reef lying between these two cuts, has not been thoroughly examined and mariners should exercise caution when navigating along its outer side.

Aspect.—Upon approaching Passes du Coetlogon the following are prominent: Cap Deverd; Ilot Deverd; Ilot Kendec; **Mont Kaala** (20°37'S., 164°23'E.); and Mont Tiebaghi, lying about 14 miles NW of Monts Kaala.

Passe Deverd lies between the NW end of Grand Recif de Mathieu and a large reef that separates this channel from Passe de Koumac. There are some large boulders on the NW tip of Grand Recif de Mathieu and a buoy is moored 0.5 mile NE of the tip.

A 7m shoal, marked by a buoy, lies about 2 miles NE of the NW end of Grand Recif de Mathieu.

Directions.—Vessels with local knowledge enter Passe Deverd with Mont Ouazangou bearing 090°, or with Pic Homedeboua bearing 086°; both courses head about 0.2 mile N of the above shoal. After passing this shoal, steer 094° for the anchorage in Baie de Gomen or if bound N, change course N and pass through Chenal de Kendec.

Alternately, pass through Passe Deverd on a heading of 107° on the middle of Ilot Deverd, passing about 0.5 mile SW of the

7m shoal marked by a buoy, and when Cap Deverd bears 093°, steer for it. When about 1 mile from Cap Deverd, change course for the anchorage.

Passes de Koumac lies between the NW end of the reef separating the channels and the SE side of Grand Recif de Koumac.

Directions.—Vessels with local knowledge head through Passe de Koumac with the right hand summit of Monts Kaala bearing 037°, or the left-hand edge of Ilot Kendec in line with Piton de Pandrop, 7 miles NE, bearing 037°, leads to the center of the channel. When about 10.3 mile from Ilot Kendec, vessels should steer 010° and pass between the E end of Grand Recif de Koumac and the reef upon which Ilot Kendec lies.

Baie de Gomen (20°44'S., 164°23'E.) is entered between Cap Deverd and Pointe d'Iouanga. Vessels with local knowledge might find shelter here during E winds in depths of 5 to 6m, mud. This bay should be avoided during NW and W winds.

There are wharves in the SE part of the bay where nickel is discharged into lighters for loading into mineral carriers, which anchor off Cap Deverd.

Chenal de Kendec to Recif de l'Arche d'Alliance

5.36 Chenal de Kendec (20°42'S., 164°17'E.) is situated E of the reef which separates Passe Deverd from Passes de Koumac, and is available to vessels with drafts to 7m. Chenal de l'Infernet is the NW continuation of Chenal de Kendec.

Caution.—Both these channels should be used with caution, as depths of less than 4m have been reported within them. The navigational aids marking them have been reported to be unreliable.

Roche de l'Infernet, with a depth of 2.5m, lies in Chenal de l'Infernet, about 1.5 miles NNW of Ile Kendec. A 4.8m patch lies close NW of this rock.

Chenal de la Fine lies close offshore between Pointe d'Iouanga and Ilot Tangadiou, about 12 miles NW. This channel can be used by vessels with drafts up to 4.6m. It affords good anchorage in its NW part.

Ilot Magonne lies about 1 mile W of Ilot Tangadiou, with Ile de la Table about 1.3 miles further W. All three of these islands lie upon reefs, the most extensive being the one extending nearly 1 mile S of Ilot Tangadiou. Ile de la Table is wooded and has a flat-topped hill on its S end.

Recif du Baron lies about 1 mile W of Ile de la Table, separated from it by Passe du Baron. Recif Archbold lies about 1 mile W of Recif du Baron.



Entrance of Passe Deverd

Recif Leleizour (20°32'S., 164°12'E.) lies about 1.3 miles N of Ile de la Table, and a small sandy islet lies upon it. This islet is visible at LW, but is often difficult to distinguish at HW. A rock, which dries 0.3m, lies about 1 mile NNE of Recif Leleizour. Two patches, each with a depth of 3.2m, lie about 1.5 miles N of Recif Leleizour.

Aspect.—Ilot Double is a conspicuous object standing in comparatively open water about 6 miles NW of Ile de la Table.

A useful mark for vessels approaching these channels from the S is the high land of **Mont Tiebaghi** (20°28'S., 164°13'E.), with its dome-shaped summit. This peak slopes NW joining Sommet Yago, which has two mounds, 230m high, about 6 miles NW.

Anchorage.—Vessels with local knowledge can anchor virtually anywhere in Chenal de la Fine. There is anchorage, in depths of 7 to 9m, about 0.4 mile NW of Pointe d'Iouanga. Anchorage may be found about 2.5 miles WNW of **Pointe Karembe** (20°38'S., 164°20'E.), in depths of 11 to 15m, sand and mud. Small vessels find anchorage, in depths of 4.9 to 5.5m, mud, about 0.8 mile W of **Pointe Pandop** (20°35'S., 164°17'E.).

Directions.—Vessels with local knowledge and drafts greater than 7m heading N inside the barrier reef from Cap Deverd or Baie de Gomen, should keep Cap Deverd bearing 093°, astern, remaining on this course until Ile Deverd bears 107°, astern, which leads out of Passe Deverd. This course passes S of and avoids the shoals with depths of 6.6 to 8.2m, lying 2 to 4 miles NE of the N end of Grand Recif Mathieu. Vessels then re-enter via Passe de Koumac.

Vessels with local knowledge and a draft of less than 7m can proceed N through Chenal Kendec; at the S entrance, Ile de la Table will be seen slightly W of Ilot Kendec, and the vessel should steer through the middle of the channel to a position 1 mile N of Ilot Kendec; then steer for the red beacon on the W side of Recif de l'Infernet, bearing 325°, until about 1 mile from it, when the vessel should steer 300° until the same beacon bears about 350°, and then steer to pass about 0.2 mile SW of the red conical buoy about 0.5 mile SW of Ile de la Table, then N through Passe du Baron, passing E of the red buoy, lying 0.5 mile NW of the NW extremity of Ile de la Table; then vessels should steer about 358° for the anchorage in Baie Paagoumene. If proceeding N of this bay, vessels should steer 328° after passing Recif Leleizour, which leads NE of Ilot Double.

Vessels with local knowledge proceeding N through Chenal de la Fine from Baie de Gomen, should follow the shore maintaining a distance of about 0.5 mile until SW of **Pointe Keremb** (20°38'S., 164°19'E.). Vessels should then head for Ilot Magonne, bearing about 310°, and pass SW of the beacon marking the SW limit of the reef extending S from Ilot Tangadiou. Then change course N heading through the channel between Ilot Tangadiou and Ilot Magonne. Then pass NE of Recif Leleizour and SW of the rock, which dries 0.3m, and the two patches each with a depth of 3.2m, lying between Recif Leleizour and Baie Paagoumene. Cap Tonnerre bearing 335°, open SW of Pointe Paagoumene, about 5.8 miles SSE, leads SW of these rocks on the NE side of the channel.

5.37 Baie Paagoumene (20°29'S., 164°11'E.) is entered between Pointe Paagoumene and Pointe Elvie, about 0.5 mile SE. Paagoumene is a port for chrome ore which is brought by

lighters from the wharf to vessels at anchor. Pilots should be obtained from Noumea.

Vessels with local knowledge can obtain anchorage, in a depth of 9.1m, at the crossing of the alignment of the range beacons; one pair is situated on Pointe Paagoumene while the second pair is on Pointe Elvie. This anchorage lies about 0.5 mile SW of Pointe Elvie. The E pair of range beacons have been reported destroyed. Deeper draft vessels anchor further out, in depths of 11 to 12m.

Baie d'Oland (20°28'S., 164°10'E.) is a slight indentation in the shore lying between Pointe Paagoumene and Cap Tonnerre, almost 6 miles NNW. During SE winds, temporary anchorage in a depth of about 8m may be found with Pointe Paagoumene bearing 160°, distance 0.75 mile. During NE winds, violent squalls come down from Mont Tiebaghi.

Ilot Double, which fronts Baie d'Oland, is comprised of two islets lying on a reef 2.75 miles WNW of Pointe Paagoumene. Two shoals, with depths of 9.2m and 8.1m, lie about 1 mile W and 0.5 mile SW, respectively, of the N Islet Double. An 11m patch lies 1 mile E of this islet.

5.38 Baie de Nehoue (20°20'S., 164°08'E.), located between Cap Tonnerre and Boh Island, about 4.5 miles NW, is encumbered by several islets and many coral reefs, making its shore difficult to approach.

The islands fronting the approaches to Baie de Nehoue are Ilot Yan'dagouet, Ilot Tiam'bouene, and Ilot Ouanne, lying 4 miles SW, 4.75 miles W, and 6.5 miles WNW, respectively, of Cap Tonnerre. Ilot Ouanne lies on the SE side of Recif Ouanne. A 6m depth lies 1.25 miles WNW of Ilot Yan'dagouet. A sand cay lies 1 mile SW of Ilot Ouanne.

Ilot Ti'ac lies about 3 miles NW of Cape Tonnerre. Ilot Tien'ghiene and Ilot Neangambo lie 1 mile ENE and 1.75 miles NE, respectively, of Ilot Ti'ac.

Tides—Currents.—Tidal currents between Passes de Koumac and Baie de Nehoue, within the barrier reef, set SE and NW.

Baie de Nehoue has few positions where vessels with local knowledge might find anchorage. The best berth is in a depth of about 7.3m, about 0.3 mile E of the largest islet lying close off the S entrance point of the bay, and 0.3 mile N of a reef that dries and can always be distinguished.

During the prevailing SE winds, there is a choppy sea in the N part of Baie de Nehoue.

Babouillat Anchorage (20°22.2'S., 164°06.1'E.) lies 0.3 mile S of Ilot Tien, with depths of 13.8 to 18m, good holding ground. Ships load chrome ore concentrates from barges at this anchorage.

5.39 Passe de la Gazelle (20°23'S., 163°57'E.) is entered between the NW end of Grand Recif de Koumac and the SE end of Grand Recif de Poum, and it is difficult to make out from seaward. Ilot Carrey, on which stands a beacon, a sandy islet lying on a reef, is sufficiently visible and divides the passage into North Pass and South Pass. The beacon on the islet, in line with the summit on Ile Tanle, 7.5 miles ENE bearing 060°, leads towards the entrance to Passe de la Gazelle. North Pass, between Ilot Carrey and Pume Reef, appears to be preferable, because the tidal currents are not as strong as in South Pass and set in the direction of the pass. North Pass has

depths for most any size vessel, while South Pass possesses a least depth of 15.4m. Passe de la Gazelle requires local knowledge for use.

Directions.—**Sommet Poup** (20°16'S., 164°03'E.), 417m high, bearing 035°, leads through North Channel. When Ilot Carrey bears 180°, vessels should head for the cone-shaped Ilot Tien'ghiene, taking care to avoid the 7.6m shoal and the sand cay lying 3 miles E and 3.5 miles ENE, respectively, of Ilot Carrey.

If using South Pass to enter Passe de la Gazelle, vessels should round the N end of Grand Recif de Koumac by eye, and when Ilot Carrey bears 000°, head for Baie de Nehoue as described above, taking care to avoid the 9.9m shoal, which lies 5 miles WNW of Cap Tonnere.

5.40 Baie de Tanle (20°18'S., 164°04'E.), located just N of Baie de Nehoue, is sheltered against all winds except those from the SW, and is said to be the only place in the NW part of the SW coast of New Caledonia where it would be possible for a vessel to ride out a hurricane. This bay, which requires local knowledge for entry, is fronted by Ile Boh, on the E, Ile Tanle and Ilot Maaboun'ghi on the S, and Recif Bonn'mahame on the SW. There is a narrow channel, available only to small craft, between the W side of Ile Boh and Ile Tanle.

Recif Bonn'mahame, upon which is a narrow sand ridge which dries, lies about 0.5 mile W of Ile Tanle. Another reef stands about 1.8 miles further WNW.

Vessels with local knowledge can obtain anchorage in the S part of Baie de Tanle. The best berth is in a depth of 7.3 to 9.1m, with the mound on the E end of Ile Tanle bearing 180°, and the S end of Ilot Maaboun'ghi in line with the NE end of Ile Tanle, bearing about 269° and the SW end of Presqu'île de Poup bearing about 289°, open slightly of the same point. Vessels can anchor close E of Ilot Maaboun'ghi.

The N part of Baie de Tanle, Baie de Pouani, dries, and vessels should not proceed N of the parallel of the S summit of Presqu'île de Poup or E of the meridian of the summit of Ile Tanle.

Directions.—Vessels with local knowledge navigating the inner passage from a position NE of **Ilot Double** (20°28'S., 164°08'E.) should continue steering 328°. Those vessels bound for Baie de Nehoue should change course to 031° when Cap Tonnere bears 094°, passing between the S entrance point of the bay and Ilot Tien'ghiene. Those vessels bound for Baie de Tanle should continue on the above 328° course as far N as Recif Bonn'mahame. Then change course NE and pass N of this reef on a course of 086°, by keeping the small cliff on the N end of Boh Island open slightly to the right of the SE point of the peninsula, located just N of the island. This course clears the sunken spit that projects N from Recif Bonn'mahame.

Presqu'île de Poup (20°17'S., 164°03'E.), whose SE side forms the NW side of Baie de Tanle, rises to a height of 417m at Sommet Poup. The peak on this peninsula's NW side is pointed and easily made out. Ile Neba and Ile Yande to the NW of the peninsula cannot be mistaken for any other land.

Caution.—A patch, with a depth of 5.5m, lies about 3.5 miles W of the S end of Presqu'île de Poup, and a reef that dries lies the same distance WNW.

5.41 Baie d'Ohope (20°17'S., 164°02'E.) indents the SW side of Presqu'île Poup and affords excellent protection against the prevailing winds. However, during strong E or NE winds, heavy squalls descend from the high land of Presqu'île Poup into the bay as well as along the entire W side of the peninsula. A small reef lies off the bays S entrance point.

Vessels with local knowledge can obtain anchorage in Baie d'Ohope, in depths of 12.8 to 14.8m, mud, about halfway between the bays entrance Points.

Passe de Poup (20°15'S., 163°53'E.) lies about 9 miles NW of Passe de la Gazelle, and it is about 1.5 miles wide between the SE end of Grand Recif des Nenema and the N end of Grand Recif de Poup. During the change of tide, a bore is encountered in the passage. Tidal currents can reach 2 knots in Passe de Poup.

Directions.—Vessels with local knowledge can transit Passe de Poup with Sommet Poup, 414m high, bearing 092°. Vessels bound N after entering the passage head for **Ilot Mouac** (20°13'S., 164°01'E.), bearing about 077°, until the W end of Ile Baaba opens E of Ile Neba, bearing less than 359°, when she should change course N and pass between Ile Neba and **Rocher Oualaouate** (20°10'S., 163°59'E.), which dries.

5.42 Baie Banare (20°12'S., 164°01'E.) is entered between Presqu'île de Poup and Presqu'île Bouabon'de, about 5 miles N; its shores are coral-fringed and several islets and rocks lie within it, which are best shown on the chart. The islets are all wooded or cultivated and coral-fringed. The village of Bouemanda lies on Pointe Bouemanda, the N end of Presqu'île de Poup.

The area between the N side of Presqu'île de Poup and Ile Mouac is known as Canal Mouac. This passage is about 0.3 mile wide between reefs on either side and has a least depth in the fairway of about 7m. A 4m patch, marked on its NW side by a buoy, lies about 0.6 mile SW of the SE end of Ile Mouac. Canal Mouac provides access for vessels with extensive local knowledge to the anchorage in the S part of Baie Banare for vessels from the S.

Anchorage.—The anchorages described below all require extensive local knowledge.

Temporary anchorage may be taken on the S side of the entrance to Canal Mouac, about 1.3 miles WSW of Pointe Bouemanda, in a depth of 7.6m, sand. There is a landing stage, 20m long, with a 3m depth alongside, situated about 0.5 mile ESE of Pointe Bouemanda.

The best protected anchorage lies about 0.3 mile ENE of Pointe Bouemanda, in a depth of 7.3m, sand and mud.

Anchorage may be found about 10.1 mile NE of the NE end of Ilot Mouac, in a depth of 10.1m, sand and mud, taking care to avoid the shoal extending WNW from Ilot Yeuae. Anchorage may be obtained in a depth of about 6.4m, about 0.5 mile NE of Rocher Pouragan, which lies on the reef fringing the SE end of Presqu'île Bouabon'de, with the NW ends of Ilot Paaio and Ilot Pionne in line, bearing 221°, open SE of Rocher Pouragan. There are several other anchorages for small vessels, protected from SE winds; these are 0.2 mile ENE of Ilot Yeuae, in a depth of 5.8m; about 0.2 mile NNE of Recif Bai, situated 0.35 mile N of Ilot Yeuae, in a depth of 5.8m; and 1.25 miles NNE of the N extremity of Ilot Nen'diale about 0.5 mile offshore, in depths of 5.8 to 7m, mud.

Directions.—Vessels with extensive local knowledge utilizing Canal Mouac pass S of the red buoy marking the shoal SW of the Ile Mouac and N of the black buoy, whose position is approximate, lying about 0.9 mile SW of Pointe Boueman'da. When the NW end of Ile Mouac bears 327°, steer about 055°, passing E of the shoal off the SE coast of Ile Mouac and then to the anchorage.

Vessels approaching the anchorage off Pointe Bouemanda from the N, should pass off the W sides of Ilots Yaba and Paaio, and then pass E of Ilot Touaye to avoid the foul ground.

Ile Neba (20°09'S., 163°56'E.), the W of the islands lying off Baie Banare, is flat in the center with several hills at either end, and is covered with coconut palms. Vessels with local knowledge can obtain temporary anchorage, in a depth of about 16m, off the middle of the W side of Ile Neba.

Basse LoLo, a rock with a depth of 4m, lies about 1.8 miles S of the SE end of Ile Neba. Depths of 5.1m and 6.9m lie 1 mile WSW and 2 miles ESE, respectively, of Basse LoLo. A patch, with a depth of 8m, whose position is doubtful, lies 3 miles WNW of the N end of Ile Neba.

5.43 Ile Baaba (20°03'S., 163°59'E.) lies off the NW extremity of New Caledonia, being separated from it by a narrow boat channel. The E side of Ile Baaba is clear of dangers; the W side has a reef projecting about 2.3 miles W from its N end, and there are several islets on it.

Ilot Yenghiebane, lying close S of Ile Baaba, is a dull red-colored islet with a village on its NE side. Small vessels with local knowledge can obtain anchorage, off the NW side of Ilot Yenghiebane, in depths 7 to 11m. A 5m patch, whose position is approximate, lies about 1.3 miles W of the W side of the islet.

Ile Yande (20°03'S., 163°49'E.), rising to 326m in its N part, lies about 7.5 miles W of Ile Baaba. The E side of the island is bold, while the W side has a gentle slope. There are coconut plantations in the island. A reef extends along the islands SW shore.

Vessels with local knowledge can obtain anchorage, in a depth of about 22m, sand and coral, protected from the prevailing SE wind off the W side of Ile Yande, with the NW end bearing 047° and the W end, bearing 152°. There is a continuous swell at the anchorage. During SW winds, vessels may obtain anchorage off the middle of the E side of Ile Yande, where there is a beach bordered by coconut palms.

Passe d' Yande (20°05'S., 163°46'E.) is between a detached reef close off the NW end of Grand Recif des Nenema and Recif Francais. The sea breaks heavily over Recif Francais. Passe d' Yande is over 1 mile wide and free of dangers in the fairway. The summit of Ile Yande, bearing 045°, leads through the passage, then the track leads in a 337° direction between Recif des Francais and Ile Yande.

Tidal currents in Passe d' Yande attain rates up to 3 knots.

Directions.—From a position about 2.5 miles W of Ile Tanle, vessels with local knowledge should steer 342°, which leads 0.35 mile W of Pointe de Poum, the W end of Presqu'ile de Poum. Continue on this course passing W of Ile Pi-onne, Rocher Oualaouate, and passing E of Ile Neba. Vessels bound for Iles Belep, after passing Ile Pi-onne, steer 321° as far as Ilots Daos, which may be passed on either side.

Ile Ti'a (19°59'S., 163°56'E.) lies about 2.5 miles NW of the N end of Ile Baaba. A reef extends nearly 0.8 mile S from the islets S shore. A rock lies about 0.5 mile SW of the W side of Ile Ti'a.

Recif de l'Arche d'Alliance (19°52'S., 163°51'E.), located 7 miles NW of Ile Ti'a, is over 1 mile long N-S, and generally breaks during SE winds. **Arama Peak** (20°17'S., 164°12'E.), in line bearing about 140° with the central hill of Ile Baaba, leads SW, and **Pume Peak**, in line bearing about 159° with the SW hill of Ile Baaba, leads NE of Recif de l'Arche d'Alliance.

New Caledonia—Northeast Coast

5.44 The NE coast of New Caledonia, like the SW coast, has an off-lying barrier reef extending its entire length. Within the barrier reef the depths vary from 40 to 90m. The bottom is generally hard rock and coral, and although there is mud in places, it is only a thin layer. Vessels should use only recommended anchorages. During bad weather, vessels should seek a safe anchorage or proceed to sea by the first safe passage.

Port Yate (22°09'S., 167°03'E.) is the estuary of the Riviere Yate, a large stream which flows into the head of the port. Mount Guemba, 591m high, stands about 1 mile S of the port and is conspicuous when making port. The fairway is very narrow and difficult, even for small vessels. Vessels should not use the port unless it is absolutely necessary. Depths in the port range from 5.8 to 12.8m. There is a small wharf in the port which is used mainly by small craft. A light is shown from a tower on a white building, situated about 1 mile SSW of the S entrance point of the port. Two leading beacons, in line bearing 283°, are situated on the N side of the port.

Port Ounia (22°02'S., 166°51'E.) is entered about 2.5 miles WNW of the Riviere Mamie. The port is protected from the N by Recif Kouanne, which is awash, lying about 0.3 mile offshore and is marked by a beacon. Between Port Yate and Port Ounia, there is no anchorage between the barrier and coastal reefs; the sea is at times very rough, and the bottom is rocky. A shoal, with a depth of 4.6m, lies 0.25 mile SW of the W end of Recif Kouanne. The port can be entered on either side of Recif Kouanne, but the E side is mainly for small vessels. The W entrance is marked by two white beacons, in line bearing 141°. Anchorage may be obtained, in a depth of 23m, mud, good holding ground, 0.4 mile on a bearing 266° from the rock that lies SE of Recif Kouanne.

Port Ounia to Thio

5.45 The coast between Port Ounia and the entrance to the Riviere Pourina, about 4.5 miles WNW, is fringed by a narrow reef, a 0.3 mile off of which there are depths of about 15.7m. About midway between the port and the river there is a conspicuous black rock lying on the coastal reef. Two reefs, which always break, lie 2.25 miles NE and 2.5 miles NNE, respectively, of the black rock. A patch, with a depth of 3.7m, lies about 0.5 mile E of the SE extremity of the N reef.

Cap Tonnedu (21°59'S., 166°46'E.) is a salient point recognizable from the sea. Its N point is the only point on this coast which has no fringing reef. A shoal, with a depth of 5.8m, lies about 0.4 mile NW of the rock off Cap Tonnedu. Baie Ouinne is entered between Cap Tonnedu and Pointe Ouinne, about 2.8 miles NW. Anchorage may be obtained by vessels with local

knowledge, in a depth of 20.1m, N of a stream which flows into the S side of the bay, about 4 miles W of Cap Tonnedu, with the two points on the S shore in line bearing 084°.

Baie Kouakoue (21°55'S., 166°39'E.) is entered 6.25 miles NW of Cap Tonnedu. Cap de Kouakoue, the SE entrance point, is visible a considerable distance from the East. A small wooded bluff, nearly 1.5 miles W of Cap de Kouakoue, divides the bay into two parts. Passe de Kouakoue, the passage through the barrier reef, is not recommended. The bay affords anchorage, in a depth of about 38.4m, good holding ground, in its SE part.

Between **Ilot Porc-Epic** (21°55'S., 166°37'E.) and the mouth of the Riviere Comboui, 11 miles NW, the coast is exposed to the heavy sea, due to the break in the barrier reef, which renders it generally unapproachable. Vessels should not approach within 2 miles of this stretch of coast.

The break in the barrier reef lying off this part of the coast is divided into three passages, Passe Sud-Est du Solitaire, Passe Nord-Ouest du Solitaire, and Passe Pavee, by Recif du Solitaire and two small reefs NW of it.

5.46 Recif du Solitaire (21°48'S., 166°38'E.) is a detached rocky reef, on which the sea always breaks, and lies about 6 miles N of Ilot Porc-Epic. It can be identified from a distance by the breakers and a small rock on its SW edge.

Passe Sud-Est du Solitaire is deep and nearly 2 miles wide between the reef on either side, and is considered to be the best passage through the barrier reef off the E coast of New Caledonia. Ilot Por-Epic, bearing 198°, leads through the middle of the passage.

Passe Nord-Ouest du Solitaire (21°47'S., 166°38'E.), on the NW side of Recif du Solitaire, is 0.75 mile wide and deep in the fairway. Mont Humboldt, bearing 244°, leads through this passage. **Passe Pavee** (21°47'S., 166°36'E.), which is separated from Passe Nord-Ouest du Solitaire by the two reefs lying NW of Recif du Solitaire, has a width of 1.25 miles, but the width of the fairway is reduced to 0.5 mile by two rocks lying in the middle of the passage.

Passe Est de Ngoe, 2.75 miles NW of Passe Pavee, is about 1 mile wide and is deep in the fairway. Passe Nord de Ngoe, about 4.5 miles NW of Passe Est de Ngoe, is about 0.5 mile wide between the sunken edges of the reefs on either side, and deep in the fairway and its approach. Ilot Sinde, bearing 176°, leads through the middle of the passage.

5.47 Baie Ngoe (21°47'S., 166°30'E.), in the NW part of which is Port Comboui, is an open anchorage about 10.5 miles NW of Ilot Porc-Epic, encumbered with coral heads. Recif de Ngoe is an extensive reef lying about 1 mile offshore and forms the E side of Port Comboui. Near the NW end of the reef lies a sandy islet.

Anchorage may be obtained by vessels with local knowledge, in a depth of about 27.4m, good holding ground, off the mouth of the Riviere Comboui. Anchorage is also available in a depth of 25m, 0.9 mile E of the S mouth of the Riviere Comboui, on the alignment of two pairs of white pyramidal beacons.

Ilot Mamere (21°45'S., 166°30'E.) is a wooded islet lying on a reef 0.75 mile NW of Recif de Ngoe. A rock, with a depth of 4m, lies 0.4 mile SSW of Ilot Mamere. Between the islet and

the coast is Passage Sud de Mamere, a deep muddy channel about 0.5 mile wide between the reefs on either side, which are defined and steep-to. Tupeti Island lies at the N end of Mamere Channel and is a conspicuous landmark. The tidal current in Passage Sud de Mamere is weak.

Port Bouquet (21°41'S., 166°21'E.) is accessible by three passages, known as Passe Sud-Est, Passe Centrale, and Passe Nord-Ouest. There are many dangers in the port, which requires local knowledge for entry. Vessels may anchor in any part of the port where there is room to swing clear of the coral shoals lying offshore. The best anchorages are in the middle of **Anse Tou-peti** (21°41'S., 166°25'E.), and in **Anse Nemou** (21°40'S., 166°22'E.), off the N side of Ile Nemou, and SW of Pointe Nemmeni, in a depth of 29.3m, good holding ground, with the SW extremities of Toupeti Island and Nemon Island in line bearing about 121°.

Ilot Kinde (21°36'S., 166°20'E.), located on a coral reef 3 miles N of Pointe Nemmeni, is wooded and surrounded by a sandy beach. Although small and low, the islet is conspicuous. Numerous coral heads are located in the vicinity of the islet and some are in the track of vessels passing N of Port Bouquet. Ilot Nileouti, located on the barrier reef about 3.5 miles NW of Passe Tupeti and 1.5 miles SE of Passe Thio, is surrounded by a sandy beach and covered with trees. It is a good mark for vessels making Passe Tupeti or Passe Thio.

5.48 Passe Thio (21°32'S., 166°19'E.) is entered between Ilot Nileouti and a reef marked by a lighted beacon, 1.25 miles West. A set of range lights stand on the shore. These lights are 395m apart and the front light stands 8m high on a pylon in position 21°36.5'S., 166°12.5'E. The lights are aligned on 227°, with an intensified sector range between 224°-230° that leads within the limits of the recommended track.

Rade de Thio (21°36'S., 166°14'E.) is located between the NW end of the chain of reefs extending NW from the N extremity of Pointe Nemmeni and the coast SW. The roadstead is sheltered, with depths of 9.1 to 18.3m, good holding ground. An ore berth here will accept vessels up to 170m in length, breadth 26m, with a draft of 10.8m.

Pilotage.—Pilotage is compulsory. Pilots can be obtained from Noumea with 24 hours notice. Berthing is not permitted at night. Pilot boards in the vicinity of 21°09.1'S., 165°44.4'E.

Anchorage.—Anchorage may be obtained in Rade de Thio, E of Rocher Bouatamere, in depths of 11 to 18m.

5.49 Baie de Nekete (Baie de Nakety) (21°31'S., 166°05'E.) lies about 10 miles NW of Thio and is easily recognized by Ile Nani on its NW side. The island divides the bay into two parts, the N part is known as Anse de Lavaissiere. The two parts of the bay are connected by a boat channel, SW of Ile Nani. The Riviere Ouen Nekete, which discharges into Baie de Nekete, is available to vessels drawing less than 2.4m to reach the town of Nekete.

Anchorage.—Anchorage is afforded vessels in Baie de Nekete in its SE sector, about 0.3 mile from shore, in a depth of 25.6m. Anchorage is also afforded in Anse de Lavaissiere, in a depth of 34.7m, in the SE part, near a small sandy beach at the SW end of which is a stream. An anchorage, used by ore carriers up to 10,000 dwt, is situated about 2 miles SSE of the summit of Ile Nani. The anchorage is on the alignment of two

pairs of privately-owned beacons standing in the hills on the E side of the bay, one pair in line bears 160° and the other pair in line bears 071°.

Baie de Canala (21°28'S., 165°57'E.) lies on the W side of Presquile de Bogota, and is entered W of Cap Dumoulin. The shores are indented by several coves which afford shelter from winds and seas. The W shore is free of dangers. Some patches, with depths of 5.5 to 10m, lie about 0.4 mile from the SW shore of the bay. A vessel bound to Baie de Canala from seaward should enter the barrier reef through Passe de Nekete or by one of the other passages farther SE, and a vessel leaving the bay should proceed through **Passe de Canala** (21°18'S., 165°57'E.), which is marked by a beacon on its NE side.

Anchorage.—Anchorage may be obtained in any part of the bay. Port d'Urville, in the SE corner of the bay, affords good anchorage, in a depth of 14.6 to 16.5m, off the mouth of the Riviere Canala. Vessels sheltering for the night can anchor in the small bay on the E side of Baie de Canala, about 1.5 miles S of Cap Dumoulin, in a depth of 29.3m, about 0.2 mile SSE of the N entrance point to this small bay.

Baie Laugier (21°23'S., 165°51'E.), entered between Cap Begat and the NE extremity of the peninsula which separates it from Baie Kouaoua, about 1 mile SW, is deep and safe, except at its head, where it is encumbered with reefs and shoals. The reef which fringes Cap Begat extends nearly 0.3 mile SW, but the shores of the bay inside its entrance points are almost entirely free of fringing reefs.

5.50 Baie de Kouaoua (21°23'S., 165°49'E.) ([World Port Index No. 57275](#)) lies about 2 miles W of Baie Laugier and is separated from it by a promontory. The port handles vessels loading ore.

Depths—Limitations.—The channel is narrowed to about 0.2 mile before reaching the anchorage, between a protruding point on the E side and a shoal flat which extends from the W shore. The head of the bay is foul for about 1.3 miles from the mouth of a stream which discharges into it. There are some shoals in the bay, which are marked by buoys and can best be seen on the chart.

A wharf on the W side of the bay will accommodate vessels up to 160m in length, with a draft of 8.5m. Vessels at the anchorage are loaded via lighter.

Pilotage.—Pilotage is compulsory. The pilot boards in the vicinity of 21°09.1'S, 165°44.4'E.

Anchorage.—Two white beacons at the head of the bay, in line bearing 152°, lead to the anchorage in depths of not less than 12.8m. A pair of white beacons on the W shore, in line bearing 252°, give the position of the anchorage. Vessels may anchor in a depth of 29.3m, about 1 mile S of Cap Begat, with the W entrance point bearing 295°.

The most sheltered anchorage in the bay is about 0.5 mile SSE of the second protruding point on the E side. In case of necessity anchorage may be obtained N of the promontory, in a depth of 29.3m, good holding ground. There is also anchorage in Baie Laugier, 1.25 miles S of Cap Begat, in 28m, with the W entrance point bearing about 295°.

Baie de Kuea (21°21'S., 165°49'E.) is located 3.25 miles W of Cap Begat. The entrance is open to the N and is about 0.4 mile wide. Anchorage may be taken, in 14.6m, with Cap Begat in range with the wooded rock standing on the reef that extends

from the E entrance point of the bay. Baie de Kuea, located just NW of Baie de Kuea, can only be used by small craft. There is a conspicuous wharf near the mouth of the river which discharges into the bay.

Cap Koua may be recognized from the SE by the prominent angle it forms in the coast line and by a rock in the form of a sugar loaf, the extreme point of which appears a little E of the sloping cliffs of the cape, which attain a height of 88m. A 2.8m and a 1.8m patch, both dangerous, lie 2 miles and 3 miles E, respectively, of the cape. **Cap des Trois Sapins** (21°18'S., 165°44'E.) lies 1 mile W of Cap Koua. It is a salient, round, black rock or hill, and is connected with the land behind by an isthmus. The cape is fringed by a reef which extends nearly 90m offshore, and extends W along the shore of Baie de Poro.

5.51 Baie de Poro (21°18'S., 165°43'E.) ([World Port Index No. 57335](#)) lies between Cap des Trois Sapins and a point about 2 miles to the W. A chain of reefs extends nearly 4 miles along the coast from a position about 1 mile W of the above cape. The middle and largest of these reefs is separated from the coast by a channel about 135m wide, with depths of 5.5 to 14.6m, which is practicable for small vessels with local knowledge.

A ruined church stands on the W shore of Baie de Poro, about 1.8 miles WSW of Cap des Trois Sapins. A reef on which there is a sand cay lies 2.5 miles N of Cap des Trois Sapins. A beacon stands on the W end of this reef. A lighted buoy is moored 0.2 mile WSW of the beacon. A shoal, marked on its W side by a buoy, lies 0.75 mile NNW of Cap des Trois Sapins. A 5m patch, marked by a lighted buoy, lies 2 miles NNW of the above cape.

Ilot Toveru (21°16'S., 165°40'E.), which is low and wooded, lies on the W reef of the above chain. A beacon stands on this islet. There are two navigable channels through the reefs SE of the islet. The E is 0.2 mile wide and clear of dangers. Shoals, with depths of 4 to 7.1m, obstruct the fairway of the W channel, which is 0.25 mile wide between the reefs. A light is shown on the head of a wharf 1 mile WSW of Cap des Trois Sapins.

The pier, which has an ore loader at its end, will accommodate vessels up to 170m long, with a maximum draft of 10m.

Pilotage.—Pilotage is compulsory. See the Noumea Port description in [paragraph 5.18](#) for details on pilotage and regulations.

Anchorage.—Anchorage is available on the range line, about 0.3 mile from shore.

5.52 Houailou (21°17'S., 165°38'E.) is a village situated 1.5 miles W of Ilot Toveru. Cargo is worked at the anchorage and landed at a wharf near the village. The anchorage is SW of the reef lying SE of Ilot Toveru, in a depth of 16.5m, about 0.4 mile offshore. It was reported vessels should anchor NE of Morne de Houailou during the Southeast Trades, in preference to the above anchorage.

Ilot Neni (21°15'S., 165°41'E.), located 1.5 miles NE of Ilot Toveru, is low and covered with palm trees. On the W side of the reef which surrounds the islet is a small sand cay, visible only at a short distance. About 0.5 miles W of the islet is a sunken reef, upon which the sea seldom breaks in ordinary

weather; at LWS, three rocks show on this reef. A 5.2m shoal, marked by a buoy, lies about 2 miles ESE of the islet.

Cap Bocage is a headland, 287m high, at the SE extremity of a deep-sided promontory, about 4 miles to the NW. The isthmus at its W end, which connects it to the mainland, is very low. When seen from the SE it resembles a high island. **Baie de Ba** (21°13'S., 165°36'E.) is located on the S side of Cap Bocage. The depths decrease from 10.9m in the entrance to 4.5m half way up the bay, and are very shallow in the inner part. The best anchorage is in 7.3m, 1.5 miles WSW of Cap Bocage. It is better to anchor nearer the N shore than the S, as there is always a heavy sea on the latter. Landing is also best on the N shore.

Passe Est de Houailou (21°11'S., 165°49'E.) is an opening in the barrier reef 8.5 miles NNE of Cap Bocage. Near the middle of the passage is a rock with a depth of 4.6m, which reduces the width of the navigable channel SE of it to about 1.3 miles. The channel NW of the rock is further obstructed by several other rocks, with depths of 1.8 to 2.7m, lying within 0.5 mile S of the reef on which Ilots Maronu lie, which forms the NW side of the passage.

In the middle of the pass the ebb current sets NE, near Ilots Maronu the flood sets SW, and along the reef on the SE side of the passage the flood sets SE. The leading mark through this passage is Cap des Trois Sapins, bearing 207°.

Passe Ouest de Houailou (21°09'S., 165°40'E.) lies 6.5 miles NW of Passe Est de Houailou. The passage is 4 miles wide, but is encumbered by a group of three shoals, with depths of from 2.7 to 4.6m, which reduces the width of the navigable channel on their SE side to about 1.5 miles. A lighted buoy marks the SE side of a 5m shoal on the NW side of the SE channel.

Pilots for the above two passages can be obtained at Noumea.

Passe Saint Exupere and Passe d'Ugue, about 3 miles and 6 miles NW, respectively, of Passe Ouest de Houailou, are encumbered with dangerous rocks, rendering them unsuitable for passage.

Baie Lebris (21°13'S., 165°36'E.) is located on the S side of Cap Bocage. The depths decrease from 10.9m in the entrance to 4.5m halfway up the bay, and are very shallow in the inner part.

5.53 Baie Ugue (21°09'S., 165°33'E.) ([World Port Index No. 57325](#)), 5 miles NW of Cap Bocage, is a small cove about 1 mile long and 0.3 mile wide between the reefs off the entrance points. The NW entrance point is wooded with pine trees. The shore reef on the S side is moderately steep-to, but a shoal which dries lies off the W end of the reef. The head of the bay, into which a river discharges, is foul and shallow. Small craft can anchor W of the drying shoal and larger vessels can anchor NE of the shoal in a depth of 12.8m, the holding ground is good.

An ore loader stands on the SE entrance point of the bay. Two ore berths are available here, the largest of which will accommodate vessels up to 170m in length, with drafts of 11m.

Pilotage.—Pilotage is compulsory. See the Noumea Port description in [paragraph 5.18](#) for details on pilotage and regulations.

The **Riviere Moneo** (21°08'S., 165°30'E.) discharges 3 miles W of Baie Ugue. Vessels may anchor off the mouths of the river, in depths of 16.5 to 20.1m, SSE of Moneo Shoal. A buoy marks the S side of this shoal. The Riviere Mu discharges 4 miles NW of the Riviere Moneo, from which it is separated by a precipitous headland. A sandy beach extends from the headland to the entrance of the river, which when seen from the E is marked by a low point covered with trees.

Ilots Harcourt, consisting of Ilot Ague and Ilot Karu, lie on reefs 2 miles N and 3.75 miles NNW, respectively, of the W entrance point of Baie Ugue. The islets are wooded and are useful marks for avoiding the adjacent dangers. There is an extensive detached reef between the two islets,;three detached shoals lie within 3 miles WNW of Ilot Karu.

5.54 Basses Bayonnaise (21°01'S., 165°30'E.) are a dangerous group of reefs and shoals about 3 miles NNW of Ilot Karu. In the middle of the group there is a reef nearly awash, and at the N end, about 5 miles from Ilot Karu, there are some patches, with depths of 0.9m. A 4.9m patch lies 3.25 miles E of the reef awash. Caution is necessary when navigating in this vicinity.

The Riviere Ponerihouen discharges 3 miles NW of the Riviere Mou; the coast between them is covered with mangroves. The village of Ponerihouen stands about 2 miles above the mouth and can be reached by boats. Vessels may obtain temporary anchorage, in good weather, in depths of 11 to 14.6m, with the N extremity of the mangroves on the S side of the entrance to the river bearing about 247°, distant about 0.5 mile.

Ilot Saint Ignace (21°02'S., 165°25'E.) lies about 1.5 miles N of the mouth of the Riviere Ponerihouen. It stands on a reef from which points project both N and S. Between the island and the shore reef there is a narrow, crooked passage, in which boats may find good shelter.

Anchorage, sheltered from the trade winds, can be obtained under the lee of Ilot Saint Ignace, in depths of 4 to 7.9m, but getting away from the anchorage at night is difficult.

Cap Baye, about 4 miles N of the **Riviere Tchamba** (21°01'S., 165°24'E.), from the SE appears as a mountainous headland with two summits. Between the foot of the mountains in the background and the coast is a narrow plain, bordered by palm trees.

Passe du Cap Baye (20°58'S., 165°32'E.) is located 6 miles E of Cap Baye. The passage is about 2.3 miles wide and is deep in the fairway. Shoals, with depths of 4.9m and less, extend 1.5 miles WSW from the N end of the reef which forms the S entrance point of the passage. The tidal currents in this passage set NW and SE. Passe de la Fourmi is located 5.5 miles NW of Passe du Cap Baye. The channels between the dangers which lie in the passage are narrow and intricate, and should not be used by large vessels.

Ilot Tidiaut lies about 3 miles NW of Cap Baye and about 0.8 mile offshore. The islet is bordered by a sandy beach and covered with pine trees on its SE side. About 1 mile NW of the islet is a reef, which dries at LWS, on which the sea always breaks. A conspicuous white chapel is situated on the coast about 2.5 miles WSW of Ilot Tidiaut. Vessels can obtain anchorage 1 mile SW of the islet, off the mouth of a small stream,

in depths of 14.6 to 20.1m. The anchorage is protected from the SE swell by Cap Baye, and from the NE by the barrier reef.

Poindimie, about 4.5 miles W of Cap Baye, the spire of the church and the college, a large white building, are good marks. The college is visible from the barrier reef W of the meridian of Ilot Tidiaut. Anchorage may be obtained off Poindimie, in depths of 7.0 to 14.9m, mud and sand, using the spire and Ilot Tidiaut as marks. There is a small wharf at Poindimie, used by boats.

5.55 Wagap (20°52'S., 165°16'E.), about 5 miles NW of Poindimie, has a stone jetty at the end of an avenue which leads from the settlement to an opening in the coastal reef. Good anchorage may be obtained about 0.5 mile from the jetty, in a depth of 16.5m, sand, with the line of avenue open, bearing 225°, and the low extremity of Cap Baye in line with the S side of Ilot Tidiaut, bearing about 121°. It is not prudent to go closer inshore, as the bottom is foul. A white house, 3.5 miles N of Wagap, is a good landmark.

The tidal current between Cap Baye and **Cap Touho** (20°48'S., 165°16'E.) set NW and SE, but are greatly influenced by the prevailing wind.

Cap Touho lies about 9 miles NNW of Poindimie; it is a conspicuous headland and is the last of the great projecting capes on the E side of New Caledonia. It is dominated by a high hill, of bright green color, and three clusters of pine trees. A beacon is situated about 0.5 mile E of Cap Touho. Ilot Atit, located on the shore reef NE of the N extremity of Cap Touho, is covered with mangroves. The shore reef at this point reaches out for about 0.8 mile and narrows the main channel between it and the barrier reef to about 1 mile. An aeronautical radio-beacon stands on Cap Touho.

Passe Centrale (20°50'S., 165°23'E.), about 5 miles NW of Passe de la Fourmi, is about 1.8 miles wide, but encumbered in its E part by shoals, with depths of 4.6 to 10.1m. There is a small sand cay on the barrier reef, on the SE side of the passage, about 0.7 mile E of the W extremity of the reef. Passe de la Bonite lies close N of Passe Centrale and is practically a part of Grande Passe de Touho. It is 0.9 mile wide and lies in a NNW-SSE position. The reefs on each side of the passage have a sand islet on them. Although the passage is reportedly clear of dangers in the fairway, it is not recommended.

Grande Passe de Touho (20°48'S., 165°19'E.) lies about 2 miles E of Cap Touho and is the finest passage through the barrier reef on the E side of New Caledonia. It has a width of about 4 miles between Grande Recif Mengalia on the N side and the reef which forms the W side of Passe de la Bonite. Shoals lie within 0.75 mile S of the S extremity of Grande Recif Mengalia, and on the N side of Passe de Touho. Ilot Ain lies 1.5 miles N of the S extremity of Grand Recif Mengalia. It is wooded and surrounded by a sandy beach. It is useful as a landmark.

Cap Touho to Port Hienghene

5.56 Baie de Touho (20°47'S., 165°13'E.), located just W of Cap Touho, is encumbered with numerous heads of coral which render it unfit for large vessels. The bay, however, affords good shelter for small craft.

Anchorage.—Large vessels should anchor outside of the large reef fronting the bay, about 1.5 miles N or NE of the guard house. Shallow draft vessels can anchor, in 5.5m, about 0.1 mile off the end of the wharf, which is situated on the E shore of the bay, close NE of the guard house. The wharf has a depth of 4m.

A small reef, awash, lies 1,100m N of the foot of the hill on the W side of the entrance to **Crique Touho** (20°46'S., 165°11'E.), about 2.5 miles W of Baie de Touho. The reef is marked by a red buoy.

Ilot Ouao (20°43'S., 165°08'E.) lies about 5 miles WNW of the W entrance point of Baie de Touho. It is fringed by a reef, which extends 1.5 miles to the East. Ilot Yengu, about 3.5 miles NW of Ilot Ouao, is fringed by a reef on its NE side, which extends about 0.3 mile offshore. A rock, with a depth of less than 1.8m, lies close SW of Ilot Yengu.

The Riviere Tipindie discharges about 11 miles WNW of Baie de Touho. About 0.8 mile SE of the entrance to the river is a hill, on which stands **Pyramide de la Pindie** (20°44'S., 165°03'E.). About 0.3 mile S of the E entrance point of the river is Rocher Violet, the S of the curious basaltic rocks which border the coast.

Banc de la Tipindie (20°43'S., 165°02'E.), between Pyramide de la Pindie and Houere (Huere), 2.5 miles NW, extends more than 0.5 mile from shore. The outer edge of the bank is marked by a buoy. It is moored about 0.5 mile NE of the N entrance point of the Riviere Tipindie.

Les Charpentiers is a reef, which dries, lying 3 miles W of Ilot Yengu and 1.5 miles offshore. Ilot Ienga lies about 2.5 miles NW of Ilot Yengu. The islet is wooded and fringed by a reef which extends about 0.4 mile from its E side. Ilot Iehgabate lies on a reef about 3.5 miles WNW of Ilot Yengu. Between these two islets are a number of reefs separated by deep narrow channels. Recif Pulanan lies about 1.5 miles W of Ilot Yengu.

5.57 Port Hienghene (Hyengen) (20°41'S., 164°57'E.) lies 5 miles NW of the Riviere Tipindie, about midway between Cap Touho and Cap Colnett. It is exposed to the wind and sea from the NE and N, and should be avoided under these conditions, but during winds within two points on either side of SE, it affords good shelter. The Towers, at the SE entrance point, and Ilot Nindio, at the NW entrance point, are good landmarks. The village of Hienghene is situated on the SW shore of the bay.

Anchorage.—It is not desirable to go too far into the bay. A good anchorage for a small vessel will be found, in a depth of 6.4m, mud, with The Towers bearing 090°. A prominent church stands on the NW shore of the bay, 0.5 mile W of Ilot Nindio.

Grande Passe, between Recif Doiman and Dongan-Yengu, is about 3.3 miles wide and deep in the fairway except for Le Cousin, a shoal with a depth of 8.2m. The depths between Grande Passe and the coast are irregular and shoals may exist which are not shown on the chart.

Passe de Hienghene (20°36'S., 164°59'E.) is about 3 miles wide between Recif Douok and Ilot Yeh Hingen. Ilot Tilguitt lies about 1 mile W of Ilot Yeh Hingen. The two above islets are low and wooded, and are separated from the mainland by a

narrow channel. On the W side of the reefs surrounding the two islets a buoy is moored.

Passe de Ouaieme (Wiciem) (20°36'S., 164°54'E.), between the reef on which Ilot Tilguitt lies and Recif de Panie, about 2.5 miles NW, is divided into two parts by a shoal, with a depth of 4.9m, near the middle, and a patch, with a depth of 4.6m, lying about 0.4 mile E of the NE extremity of Recif de Panie. **Passe de Puail** (20°35'S., 164°51'E.), separated from Passe de Ouaieme by Recif de Panie, is narrow and dangerous, and is not recommended.

Passe de Tao lies between Recif Tao and Recif Colnett. The passage lies in a NW-SE direction, and is about 0.5 mile wide, but is obstructed in the center of the fairway by two patches, with depths of 8.2m. There are some shoals projecting from the reef on each side, and a patch, with a depth of 2.7m, lies about 0.5 mile NW of the NW extremity of Recif Tao. There is a pier, with a depth of 7m at its head, near Tao Village.

Cap Colnett (20°30'S., 164°46'E.) is a salient point 15 miles NW of Baie Hienghene. It is the highest part of New Caledonia. The mountains in the vicinity of the cape are nearly all sharp serrated ridges. Sommet Colnett stands about 3 miles SSW of the cape and has an elevation of 1,514m. A shoal, with a depth of 0.6m, lies about 0.5 mile E of the cape, about 0.3 mile offshore.

Cap Colnett to Ile Pam

5.58 Between Cap Colnett and Pointe Nen'diaran, about 30 miles NW, the coastal reef is steep-to. Several small streams discharge, and the resulting breaks in the reef affords shelter to small craft. The NW part is very mountainous and its coast is fringed with mangroves.

Port Henry (20°25'S., 164°38'E.) is situated about 8.5 miles NW of Cap Colnett. Anchorage may be obtained, in a depth of 7.3m, mud and sand, good holding ground. It has been reported that many vessels have ridden out gales without sustaining any damage. There is a jetty at Port Henry.

Passe le Leizour, between the NW end of Grand Recif Colnett and Grand Recif de la Seine, is 0.75 mile wide, but is narrowed by the submerged prolongation of the reefs on either side to about 0.3 mile. The entrance to the passage may be located from the N by the cascade at Tao, bearing 159°, and in clear weather by **Sommet Panie** (20°36'S., 164°47'E.), bearing 170°.

Passe de Pouebo (Passe de Pueblo) lies between the NW end of Grand Recif de la Seine and the SE end of Grand Recif Pouma. The white church at Port Pouebo, bearing 226°, leads through the passage. The passage can be identified by its remarkable funnel-shaped entrance. On the NE side of Grand Recif de la Seine is the entrance to a lagoon, which should not be mistaken for a passage through the reefs.

Passe de Balade and Passe d'Amoss, between Grand Recif Pouma and Grand Recif de Cook, are separated from each other by Recif Balade. Passe de Balade is 0.5 mile wide and safe. Passe d'Amoss is not recommended as it has not been surveyed.

The inner passages can best be seen on the chart.

5.59 Port Pouebo (20°22'S., 164°35'E.), between the N side of Muelebe Flat and Bailly Point, is about 0.9 mile long

and 0.3 mile wide between the steep-to reefs on either side. There is no difficulty entering the port, but it is sufficient to keep midway between Muelebe Flat and the reef fringing Bailly Point. A beacon stands on the NE extremity of Muelebe Flat; a second beacon, reported (1996) destroyed, stands on the NW extremity.

The river which discharges into the port can be ascended by boats as far as the mission station, where there is a conspicuous white church. Anchorage can be taken as desired by a bearing on Bailly Point. Strong NE winds send in a heavy swell, but the holding ground is good.

Plateau de Freycinet (20°17'S., 164°30'E.), located 6 miles NW of Bailly Point, is a coral reef which is steep-to on the S or channel side. The flat is prolonged to the SE by two patches which nearly always breaks. About 1 mile SE of Recif Anlo, the S of the two patches, is an isolated sunken rock on which the sea always breaks. There are several shoal spots extending 0.9 mile W from the flat. A beacon stands on the edge of the coastal reef abreast of Recif Anlo. **Ilot Poudioue** (20°17'S., 164°30'E.), low and bare, lies on the coastal reef S of Plateau de Freycinet. There is an anchorage 0.7 mile NW of Ilot Poudioue, but should only be used during good weather. The anchor may be dropped in a depth of 12 to 12.8m, with Ilot Poudioue bearing 115°, and the W blockhouse on shore, bearing 195°.

In the channels S of Plateau de Freycinet, the flood current sets SE and the ebb current sets NW.

Anse de Tiari (20°14'S., 164°21'E.) is entered W of Pointe Daoubin. Anchorage may be obtained, in depths of 20.1 to 25.6m, with Pointe Daoubin bearing 105°, distant about 0.5 mile. Pointe Nen'Diaran lies about 2.8 miles W of Pointe Daoubin. The point is the abrupt termination of the mountain range which occupies the NE side of New Caledonia. A prominent white house stands on the side of a hill about 1 mile SE of the village of Tiari.

Ile Pam to the Northwest Point of New Caledonia

5.60 Ile Pam (20°15'S., 164°17'E.), located about 0.8 mile W of Pointe Nen'Diaran, is a narrow island about 3 miles in length, in a N-S direction. The island is traversed throughout its length by a chain of hills. On the E side of the island the hills slope to the shore, whereas, on the W side there is a band of mangroves between the shore and the base of the hills. Beacons mark the NE extremity of a reef which extends 0.5 mile N from the island. Two other beacons mark the reef.

Baie de Pam (20°14'S., 164°18'E.) is entered between Ile Pam and Pointe Nen'Diaran. The deposits from **Fleuve Diahot de Bon De** (20°20'S., 164°20'E.) tend to diminish the depths in the bay, especially in the SE part, where there is a large bank that partially uncovers at LWS. A narrow spit lies about 0.5 mile N of this bank, with depths of 3.7 to 4.9m, leaving a channel with depths of 4.9 to 7.3m on its E side. The extremity of the sandspit which extends about 0.2 mile W from Pointe Nen'Diaran is marked by a beacon.

Directions.—A vessel entering Baie de Pam should keep midway between the beacon W of Pointe Nen'Diaran and the E side of Ile Pam, and anchor, in a depth of about 11m, about 0.3 mile N of the rocky islet lying close off the E side of Ile Pam, located about 0.8 mile SSW of Pointe Nen'Diaran, keeping the

S part of Ile Balabio open of the NE extremity of Ile Pam. A small vessel may anchor E of the bank with a depth of 3.7m.

Baie d'Harcourt, located W of Ile Pam, may be approached from the E through Goulets d'Arama or Canal de l'Alcmene. A white cross on the red cliff near the village of Arama, in the SW part of the bay is conspicuous. The waters in this bay and in the channels leading to it, especially after heavy rains or gales, is turbid to a marked degree, and large light-colored patches which may be mistaken for shoals sometimes appear on the surface.

Anchorage.—The best anchorage is toward the E side of the bay near Ile Pam, in depths of from 12.8 to 14.6m, with the summit of the island bearing 090°. Good anchorage can also be taken about 0.8 mile from the mouth of the small river which discharges close N of the village of Arama, with the red cliff bearing between 247° to 270°, and **Ilot Nen'Dahande** (20°10'S., 164°15'E.) bearing between 020° and 026°, in depths of 7.3 to 8.2m, mud and sand.

5.61 Ile Balabio (20°07'S., 164°12'E.) lies with its SE extremity 6 miles NW of Pointe Nen'Diaran. The island is high and wooded, and its W side is bordered by mangroves. The inner channels between the island and the main island are restricted by the surrounding and off-lying reefs, particularly near Pointe d' Oumap. The island is fringed by reefs, rocks, and off-lying islets.

Ilot Nen'dahande, about 0.8 mile SE of the SE extremity of Ile Balabio, is high, and from the E is saddle-shaped. The islet is one of the best marks for navigating the N channels.

Canal Napias (20°10'S., 164°15'E.) is a narrow and crooked channel that opens between the reef of the same name and the SE point of the extensive reef on the SW side of Ile Balabio. The channel should only be used by vessels with local knowledge. The channel has not been thoroughly surveyed and there may be depths of less than 6.7m.

Canal de l'Alcmene (20°12'S., 164°14'E.) has a least width of 0.5 mile and is easy to access. The channel is marked with navigational aids. A patch, with a depth of 6.7m, lies nearly in mid-channel, 1 mile NNE of **Ilot Taabam** (20°13'S., 164°13'E.).

Canal Devarenne lies between Plateau Devarenne and the SW side of Recif de Balabio. It is the only channel within the barrier reef through which a vessel of moderate draft can pass from one side of the main island to the other. It has a least width of 0.45 mile and a least depth in the fairway of 6.7m. The greatest depths are on the Recif de Balabio side. The channel is marked by beacons and buoys, but reliance should not be placed on the existence of these aids in this vicinity.

The water is smooth in these channels, and vessels may anchor anywhere under the lee of Ile Balabio, or N of Plateau Devarenne. A vessel may obtain temporary anchorage, in depths of 9.1 to 11m, about 0.5 mile W of Ilot St. Phalle and Ilot Sables d'Olane.

Mouillage de la Fine, W of the N extremity of Ile Balabio, is only suitable for vessels of moderate size. The recommended berth is in a depth of about 6.4m, good holding ground, with the small hill on the W extremity of Ile Balabio bearing 180°, and Ilot Tahanlagh, located close N of the N extremity of the same island, bearing 030°.

The W current sets W through all the channels in the barrier reef; the W current in Goulets d'Arama and Canal Devarenne is very strong, attaining a maximum rate of over 5 knots.

Pointe d' Oumap is located on the mainland W of the S entrance to Canal Devarenne. The point is a projecting red cliff flanked on each side by a sandy beach. Pointe d' Pouthier lies about 5.8 miles NW of Pointe d' Oumap. There is temporary anchorage, in about 8.2m, 0.4 mile NNW of Pointe d'Pouthier.

Ilot Daougae (20°04'S., 164°02'E.) is located on the shore reef which borders the N extremity of New Caledonia. The highest part of Ilot Daougae, a cliff at the N end, forms a good landmark. Good anchorage sheltered from SE winds may be obtained 1 mile WNW of the islet, in depths of 8.3 to 12m, sand.

Passe d'Amoss to Grand Passage

5.62 The barrier reef continues for nearly 100 miles from Passe d'Amoss and is known as Grand Recif de Cook. The SE part is marked, and is steep-to on its outer side, SW of it is an extensive unsurveyed area which should be avoided. There is a continuous line of breakers with a few openings throughout the reef. Grande Fausse Passe, 36 miles NW of Passe d'Amoss, is accessible only for boats.

Passe Ongomboua (19°20'S., 163°46'E.) lies about 27 miles NNW of Grande Fausse Passe. Ilot Ongomboua, which is low, sandy, and covered with grass, lies in the middle of the passage; there is a channel on either side which lie obliquely to the general direction of the reef, and each with a depth of about 18.3m. This is the first practicable passage in the reef NW of Passe d'Amoss.

There are five other passages through the barrier reef between Passe Ongomboua and the NW end of the reef, 40 miles NNW. The first of these, 8 miles NNW of Passe Ongomboua, is divided into two channels by a sandy islet nearly covered at HW; the fifth and N passage (19°00'S., 163°35'E.) is about 5 miles wide. The tidal currents through the above passages are very strong.

Caution.—None of these passages through the barrier reef have been surveyed, therefore, the descriptions should not be considered to be accurate. The reefs N of 19°30'S are imperfectly charted. There is generally a heavy sea breaking on the most northerly of these reefs.

5.63 Grand Passage (18°44'S., 163°15'E.) lies between the N extremity of Grand Recif de Cook and the S extremity of Recifs d'Entrecasteaux, and is about 20 miles wide. The current through the passage is generally W at a rate of 1 knot, though a NW current of about 2 knots has been experienced after a period of strong winds. Since the N limits of the barrier reefs were determined, several vessels have touched, and some been lost, on reefs in Grand Passage.

It is necessary to exercise the greatest prudence in navigating in these unsurveyed waters, and it is recommended to pass through them during daylight, and only then with the sun behind, so as to ensure being able to discern the changes in the color of the sea from aloft.

Recif Pelotas (18°38'S., 163°12'E.), about 6 miles long, lies on the N side of Grand Passage. The sea breaks over the reef.

Recifs D'Entrecasteaux (18°15'S., 163°05'E.) are a continuation N of Grand Recif de Cook on the E side, and Recif des Francais on the W side. The reefs form two lagoons, both accessible to vessels with local knowledge.

Lagon de la Surprise (18°27'S., 163°07'E.) is the S lagoon and the larger of the two. From the S extremity of this lagoon, the S lagoon of this group of reefs, a single reef, surrounds the SE, NE, and part of the NW sides of the lagoon; in the remaining portion of the enclosing reef there are several openings and three islands.

Ile de la Surprise (18°31'S., 163°01'E.) lies on the SW part of the reef enclosing the lagoon. The surface of the island is half covered with palm trees. Like the other islands of this group it is bordered by a gently sloping white sandy beach. A good mark is a black iron mast situated S of a clump of coconut trees. There is a white beacon on the W extremity of the island.

The weather side of the island is inaccessible, but the lee side, although protected by coral heads, is easily approached by boats, which can land on a beach near a small stone building with a white roof.

There are three passages into the lagoon available to vessels with local knowledge, but they should only be used during the daylight hours. Passe de Ile de la Surprise lies on the W side of Ile de la Surprise and is deep. There is a small reef located nearly 1 mile N of Ile de la Surprise, and between this reef and one W of it there is a passage, which appears to be clear of dangers, but has not been examined.

There is a passage located about 2.5 miles ESE of Passe de Ile de la Surprise, which has been used by a steam vessel. There is another opening near the SE elbow of the reef, which carries considerable depths, but the currents are very strong across it and the sea is much heavier than the ones mentioned above. The other openings on the NW side appears to be encumbered by rocks.

Anchorage.—The anchorage off Ile de la Surprise is on the N side of the island, in about 25.6m, with the NW extremity of the island bearing 227° and the SE extremity bearing 196°, good holding ground, but there is a current of 2 knots and a fresh SE wind. A vessel anchored in 29.3m, good holding ground, with the wharf on Ile de la Surprise bearing 260°, distant about 1.5 miles; there was a fresh trade wind and a moderate sea.

Anchorage may be obtained by vessels with local knowledge off the NW side of Ile Fabre, in a depth of 45.7m, about 1 mile offshore. Anchorage is afforded vessels with local knowledge in a depth of 32.9m, with the W extremity of **Ile Le Leizour** (18°20'S., 162°58'E.) bearing about 180° distant 0.5 mile.

5.64 Lagon de L'ile Huon (18°05'S., 162°50'E.) is separated from Lagon de la Surprise by a deep passage, 6 miles wide. On the N extremity of the encircling reef are some coral blocks of moderate heights. Within the lagoon, both at the N and S ends, there are several coral heads. On the W side of the lagoon there are several openings a short distance apart, Passe du Sud, the S opening is 500m wide and very deep. To enter the pass, a vessel should keep about 0.1 mile N of the breakers on the S reef.

Ile Huon (18°01'S., 162°55'E.) lies near the middle of the encircling reef on the E side of the lagoon, and is the N island of Recif d'Entrecasteaux. The island is prolonged at each end by a bank of sand as high as the surface of the island. Part of the island is wooded. West of Ile Huon there is a rock, with a depth of 4.9m, with the extremities of the island bearing 070° and 129°, respectively.

Anchorage.—A protected anchorage may be obtained by vessels with local knowledge, in depths from 27.4 to 29.3m, with the rock mentioned above, distant about 0.4 mile, bearing 250°. During strong SE winds, the water is smooth and the holding ground good. This anchorage is the only one possible during winter.

Petrie Reef (18°30'S., 164°20'E.) was reported to lie 4.5 miles further E than charted. A sandbank, awash, lies on the S end of the reef which extends about 8.5 miles NNW. Foul ground, with two reefs on it, extends about the same distance NW, forming a basin about 4 miles wide, open to the NW. Anchorage may be obtained in this basin during good weather, sheltered from the swell, except between NW and SW winds. The bottom is white sand, and the depths diminish gradually towards the reef. A wreck lies on the N end of the reef.

Near Petrie Reef, at spring tides, the tidal current sets N and S at a rate of 1 knot. Off the N extremity a strong tide rip has been observed, the current, at the time setting NE. It was reported breakers were seen 33 miles SSE of the S end of Petrie Reef.

5.65 Recif des Francais (19°39'S., 163°22'E.) consists of a number of reefs extending from Grand Passage for about 75 miles SSE to Passe de Yande. It consists of a double row of nearly parallel reefs, separated by a narrow, deep lagoon strewn with a number of coral heads. The width of this chain decreases from 3 miles at Passe de Yande to 1 mile at Petite Passe.

Passe du Nord is a break in the reef about 14 miles NW of Passe du d'Estrees. It is not sufficiently known to be of use for navigation. Passe du d'Estrees lies about 11 miles NW of Petite Passe and is divided into two parts by an islet. The passage S of the islet has been examined and is deep and safe. The reef on the S side of the S passage is steep-to. Three rocks, visible about 5 miles, stand on a reef located about 2 miles N of the passage. Petite Passe, a small opening in the reef about 23 miles NW of Passe de Yande, is not recommended.

Archipel de Belep (19°41'S., 163°39'E.), the S island of which lies 20 miles NW of the N extremity of New Caledonia, are a group of islands extending in a N-S direction for a distance of 23 miles. The group consists of two large islands, a small island, and several islets.

Ilot Daos du Sul and Ilot Daos du Nord are the S islands of the Archipel de Belep. The islets are of sufficient height to be seen from Ile Yande and Ilot Ti-a. The E and W sides of both are steep-to. A rock, awash, lies about 0.3 mile N of the N islet of Daos du Sud. Just S of the S islet are three needle-shaped rocks named Les Trois Soeurs. **Ile Nienane** (19°49'S., 163°41'E.), located between Daos du Nord and Ile Art, is a high bare rock.

Ile Art (19°42'S., 163°39'E.), the largest of Archipel de Belep, is moderately bold; at its S end it rises to a height of 252m. The E side is steep, except for the fringing reef S of Baie

Male, which always shows, and a reef extends 0.75 mile off the NE coast. Peiroma, an inlet at the S end of the island, has not been examined, but appears foul; two rocks, the SW of which is marked by a conspicuous white cross, lie at the SW extremity of the inlet. Andiane is a slight indentation at the SW end of the island in which anchorage may be obtained in depths of 16.5 to 20.1m.

Baie Uala (19°43'S., 163°38'E.) lies on the W side of Ile Art about 5 miles from its S extremity and is about 0.8 mile wide at its entrance. There is a weather station on the N entrance point of the bay. Anchorage is afforded, in depths of 10.1 to 11.9m, in the inner part of the bay, with the hill on the NW entrance point bearing 310°, sheltered from the wind from the NW through E to S. There is also anchorage in a depth of 6.7m, with a rocky point on the SE shore bearing 155° and the church bearing 047°.

5.66 Baie Aue (19°40'S., 163°38'E.) indents the N half of the W coast of Ile Art to a distance of 1 mile. At an average distance of 1 mile from the shore, the bay is fronted by three reefs extending in a general N-S direction. The two largest reefs are separated by a channel having a width of 0.3 mile and

depths of 10.9m in the fairway. The bay is exposed to winds from the S through W to NW.

Anchorage.—Anchorage is usually taken in 18.3m, good holding ground, with the W extremity of Ile Art bearing 183°, and the small cliff at the N end of the sandy beach at the head of the bay bearing 097°. While this position is good at all seasons, it must not be assumed to be safe during a hurricane. The anchorage is exposed to winds from the NW and S. During heavy NW seas, a relatively better position is nearer the reef than the shore.

Ile Pott (19°34'S., 163°36'E.) lies 1.5 miles NNW of Ile Art, the navigable channel between them being over 1 mile wide and clear of dangers in the fairway. The small bay on the W side of the island is encumbered with coral rocks. Small craft may obtain anchorage off the S end of the island.

A reef, which dries, the charted position of which is approximate, lies about 4 miles ENE of the N extremity of Ile Pott. A reef, which also dries, lies about 6.5 miles NE of the N extremity of the island.

The tidal currents between **Ilot Ti-a** (19°59'S., 163°56'E.) and Ile Art are strongest off the edges of the reefs and set SW and NE.